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THE

MODERN TREATMENT

OF

SYPHILITIC DISEASES.

THE

MODERN TREATMENT

OF

SYPHILITIC DISEASES,

BOTH

PRIMARY AND SECONDARY;

COMPRISING

THE TREATMENT OF CONSTITUTIONAL AND CONFIRMED SYPHILIS
BY A SAFE AND SUCCESSFUL METHOD;

WITH

NUMEROUS CASES, FORMULÆ, AND CLINICAL OBSERVATIONS.

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LANGSTON PARKER,

SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

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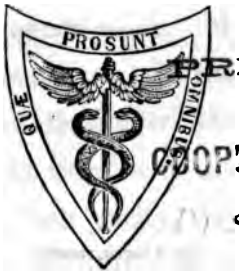

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PREFACE.

I have now devoted nearly twenty years to the therapeutics of Syphilis, more especially in its Secondary and Constitutional forms. During that period, without taking into consideration the extended field of observation, which a large hospital constantly presents, I have personally treated more than eight thousand cases. The results of my experience are recorded in the following pages. The present Edition must be looked upon more in the light of a new work, than a new edition, as every line has been carefully revised, and re-written where my opinions have undergone any change; again, as will be seen, great additions have been made, amounting to considerably more than one half of the entire work. My cases have been tabulated, and kept according to the annexed plan: I have selected from them, and distributed, through the following pages, such as I thought were more than usually interesting from their nature, their rarity, their marked illustration of doctrine, or of difficulty, or peculiarity in treatment.

Mode in which the Cases alluded to have been registered.

1. Name, Date, Age, Occupation, &c.	2. Disease.	3. Habit of Body.	4. History and Anterior Duration.	5. Causes.

6. Primary Symptoms.	7. Pathology. — Examination by Speculum or Bougie.	8. Treatment of Primary Symptoms.	9. Symptoms accompanying the Specific Disease.	10. Consecutive Symptoms.—Bubo, Phymosis, &c.

11. Constitutional Symptoms.	12. Recurrence of Symptoms.	13. Treatment of Constitutional Symptoms.	14. Accidents occurring during Treatment.	15. Result and Remarks.

20, Colmore Row, Birmingham;
December, 1853.

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THE

MODERN TREATMENT

OF

SYPHILITIC DISEASES.

PART I.

PRIMARY SYPHILIS.

CHAPTER I.

ON THE SIMPLE OR NON-MERCURIAL TREATMENT OF SYPHILIS.

THE modern history of Syphilis, both as regards its pathology and therapeutics, dates from the time of John Hunter, whose treatise on the venereal disease appeared in 1786. The doctrines of that surgeon have influenced surgical opinions and practice even to the present day. Hunter regarded syphilis and gonorrhœa as varieties of the same disease, and, looking upon mercurial inunction as the grand panacea for both, submitted both to the same treatment. This was opposed in his own day by Benjamin Bell, of Edinburgh; but so powerful for good or evil are the doctrines of a great man, that even up to the period of Sir A. Cooper's appointment to Guy's Hospital, patients suffering from gonorrhœa were compelled to rub in so many drachms of mercurial ointment till a profuse salivation was induced. Even the late Professor of Surgery in the University of Edinburgh[1] charges a father as being unnatural, who, having a son suffering from syphilis, would submit him to any treatment except a mercurial one.[2]

[1] Sir C. Bell; see his "Institutes of Surgery."

[2] "Les extrèmes se touchent," says the French proverb. The present professors in the University of Edinburgh now entirely repudiate mercury in the treatment of all forms of syphilis, both primary and secondary. We apprehend this doctrine to be

Hunter proved the existence of a specific "morbid animal poison," or "virus," by inoculation, which doctrine, revived in the present day by M. Ricord, has added little to what Hunter had already taught on this subject. When the physiological school of medicine and surgery arose in France, its founders and partisans, reviving the idea of Bru (Methode nouvelle de traité les Maladies vénériennes, Paris, 1789,) denied the existence of a special poison, or virus, altogether, attributing the phenomena, or pathological symptoms, called "*syphilitic*," to certain modified conditions of ordinary irritation. Richard des Brus (De la non-existence du Virus vénérienne, Paris, 1826,) and the learned M. Jourdain (Traité complet des Maladies vénériennes,) may be named as the most strenuous supporters of physiological doctrines so far as they relate to the pathology of syphilis.

An eclectic or mixed doctrine was taught in this country first by the late Mr. Carmichael, of Dublin, in which it was shown that many primary sexual ulcers were due to the action of a specific virus, and were best combated by specific remedies: whilst, on the other hand, a great number of these ulcers were due to the ordinary forms of irritation, and required no specific treatment for their cure.

In 1813 Mr. Carmichael first drew the attention of the profession in this country to the treatment of venereal diseases without mercury, limiting the employment of this medicine to certain forms of primary and constitutional infection. Mr. Carmichael inculcated the employment of mercury "in alterative doses" in cases of the "simple primary ulcer of the papular venereal disease which did not yield to rest, the antiphlogistic treatment, and astringent washes, and to produce its full effects in the true Hunterian chancre, with hardened edge and base." In the constitutional forms of disease this surgeon had recourse to mercury in alterative doses, "when the papular and pustular eruptions became scaly, and obviously on the decline, and had not yielded to sarsaparilla, antimonials, and the hydriodate of potass," to produce its full effects in iritis, in nodes when iodine had failed, and for the scaly eruption, the lepra or psoriasis which attends it, and the deep excavated ulcer of the tonsils.

as pernicious as the one previously inculcated by the late Professor of Surgery. Syphilis is modified and complicated in a variety of ways by the age, habits, and constitution of the patient; and that treatment can only be rational, successful, and safe, which is eclectic, and founded upon the actual nature and peculiarities of each individual case.

It will be perceived that this practice is materially different from that employed on many parts of the continent, in Paris, Hamburgh, Vienna, Sweden, and other places, where many surgeons treat venereal diseases, in all forms, without the exhibition of any mercurial preparation.

Various plans of treating syphilis without mercury have been practised by surgeons in all parts of the world prior to the time of Broussais, although that treatment, which is denominated at the present day "simple," dates its origin more immediately from the doctrines of that pathologist. Broussais, considering syphilis as a mere irritation without any specific character, promulgated in 1815 the following opinions on its nature and treatment:[1]

"That syphilis is an irritation affecting the exterior of the body. That it is at first a local disease, but becomes subsequently constitutional; that, to prevent the latter, the local disease must be treated by antiphlogistics, more particularly by frequent and full local blood-letting.

"That confirmed or constitutional syphilis may be cured by abstinence and an antiphlogistic treatment; but this method being tedious, mercury and sudorifics are generally preferred. That mercury and sudorifics cure syphilis by producing revulsion upon the exhalant capillaries:" hence, by Desruelles[2] and others, this is termed the "revulsive treatment."

"That the remedies termed antisyphilitic should be administered internally with caution, otherwise they commonly produce gastro-enteric affections, which exasperate the primitive disease; the revulsive action of the remedies is thus prevented, irritation is set up in the viscera, which terminates ultimately in their disorganization.

"When the remedies termed antisyphilitic have produced gastro-enteric irritation or inflammation, and the syphilis is not cured, the latter only amends with the affection of the stomach and bowels, and a long perseverance in a strict antiphlogistic regimen. If the abdominal viscera are disorganized or the patient too much weakened, the cure is impossible.

"Mercurial preparations applied topically to external syphilitic irritations or sores, exasperate them always when they are intense, irritable or inflamed. They cure them only when they are indolent, by opposing irritation to irritation. This fact is also applicable to all visceral inflammations, &c.

[1] Examen des Doctrines Médicales.

[2] Traité des Maladies vénériennes; Paris, 1836.

"Scrofulous subjects are more difficult to cure of syphilis than others. Those predisposed to visceral irritations should, when suffering from venereal affections, be treated on the antiphlogistic plan, both externally and internally. If treated internally by mercurials, the viscera are excited, and sometimes the syphilis itself is not cured."

Such are the principles laid down by Broussais, for although the non-mercurial treatment of syphilis had been occasionally resorted to, it was left to Broussais to lay down the simple treatment as a system. In the aphorisms of this pathologist many opinions are promulgated in reference to syphilis, which are contradicted by all ancient and modern experience, and even by the most candid of the followers of the physiologic school. We do not consider syphilis a mere irritation, independent of any specific character, as the researches of Ricord and others amongst the moderns sufficiently prove. It is a specific disease, inasmuch as many of its forms may be propagated by inoculation, and thus diseases of a precisely similar character produced.[1] It is a disease of irritation, inasmuch as all venereal sores are accompanied by a greater or less degree of inflammation; the intensity of this inflammation, and consequently the violence of the disease, depending on the constitution of the patient, the circumstances in which he is placed, his habits of living, and the local treatment of the syphilitic sore.

The simple or rational treatment is directed towards the removal of all the local and constitutional irritation which accompanies a venereal sore, by which the sore itself in many instances heals, and the disease is cured. Where it becomes necessary to employ mercury, it will invariably be found advantageous to administer the remedy in accordance with the principles of the simple treatment. This proposition is illustrated by the practice of the late Dr. Wallace, of Dublin, who states that the most appalling forms of syphilis which he has met with have resulted from the injudicious application of mercurial preparations to venereal sores in a state of irritation or inflammation.

In all venereal affections, whether primitive or secondary, the diet should be light and unstimulating, and directly proportionate to the degree of irritation accompanying the disease, to the age and idiosyncrasy of the patient. It is difficult (says M. Cullerier) to conceive why the regulation of diet, so important in all other diseases, whether acute or chronic, should have been totally neg-

[1] See Ricord; Traité pratique des Maladies vénériennes; Paris, 1838.

lected in the management of syphilis. The patient should be placed upon the lowest possible diet when the local venereal affection is accompanied by much inflammation or irritability, when the affections are numerous in the same individual, if the disease be constitutional, the principal viscera in a state of excitement or irritability, and the subject young and vigorous. This regimen should be still more closely adhered to if the affection occur in spring or autumn, and is yet more strongly indicated if the patient be subjected to a mercurial course.[1] Desruelles recommends a milk diet if the patient be weak and the viscera unsound.[2]

On this point no fixed rules can be laid down; they must be dictated by the circumstances of the case, and call for the exercise of much judgment on the part of the practitioner. It may be easily conceived that the severity of the regimen must vary according to the constitution of the patient we have to treat. Some subjects are soon weakened or rendered irritable by abstinence, or quickly placed in conditions favourable to the action of remedies; others, again, are not so readily brought into such states; and in some instances it becomes necessary to resort to general blood-letting and the warm bath.[3] It constantly happens that primary ulcers which

[1] See Desruelles on this subject, op. cit., p. 249.

[2] In Sweden and Denmark, venereal diseases are treated systematically by diet alone, and to this plan the name "cura famis" has been given. It consists in submitting the patient to a very severe regimen, and the administration of the extracts of bark and conium as medicines. The regimen of the patient during the first six weeks consists of five ounces of roast meat without gravy or condiment of any kind, and six ounces of white bread soaked in water; this quantity is divided into two or three portions, but it is the whole quantity allowed for one day's consumption. The extract of conium is given in doses of four or six grains night and morning. At the end of six weeks the patient resumes his ordinary diet. All kinds of venereal diseases may be treated on this plan, whether recent or inveterate; but it is particularly indicated where mercury has been used without success, or where syphilis exists in a gouty or scrofulous constitution. A decoction of the root of the "smilax china" is given for drink to the extent of two pints in the day. (Exposé de la Méthode pour guérir les Maladies vénériennes dégénérées, par Osbeck; Stockholm, 1811.)

The commission appointed to examine into the merits of this plan of treatment, decided that the cure was due to the regimen alone, and the medical treatment had little or no effect. The Swedish physicians restrict the "cura famis" to cases of constitutional, inveterate, or protracted syphilis. In primary syphilis it is considered injurious, and is supposed to favour the development of constitutional disease by rendering absorption more active.—For a further account of this mode of treatment, see Bibliothèque Médicale, tomes 60 et 61.—Journal de Hufeland, Juin, 1817, "Quelques notices sur les Institutions Médicales de Stockholm, et sur le traitement par la Faim, usité dans les hôpitaux de cette ville."—Gibert; Manuel des Maladies vénériennes; Paris, 1837.

[3] Lucas Championnière; La Thérapeutique de la Syphilis, p. 115.

resist all modes of treatment when the patient pursues his ordinary occupation, and lives in his usual way, heal rapidly when the patient is confined to bed and lives low. I have verified this hundreds of times, both in hospital and private practice. I introduce two cases by way of illustration.

Case I.

Secondary venereal ulceration of the throat of many months' standing; failure of the ordinary remedies whilst the patient used her ordinary diet; rapid cure by the same remedies and abstinence.

A healthy-looking female, æt. 26, was sent to me from the country for my opinion respecting her throat, which had been the seat of venereal ulceration for some time past, and for which she had taken mercury under various forms without benefit. During this treatment she had followed her usual occupations and lived in her usual way. There were three deep ulcers on the soft palate, and one on the left tonsil; the remaining portion of the throat being generally of a vividly red colour.

I advised her to leave off animal food, stimulants of all kinds, and take as little food, and that only in the shape of tea or gruel, as she could be comfortable under. She was ordered the third of a grain of tartrate of antimony three times a day, and mercurial frictions to the axillæ. All the ulcers had healed in a fortnight.

I detail a second case in illustration, where a totally opposite effect was produced in a protracted case by abstinence and low diet, and this is by no means uncommon.

Case II.

A gentleman, æt. 46, in the habit of living well, contracted a primary sore, which was succeeded by a well-marked attack of syphilitic lepra, which affected the hands, the face, the abdomen, and other parts; for this secondary disease he placed himself under my care, and was treated by the mercurial vapour bath; the scaly eruption had disappeared in about three weeks; two livid blotches, however, remained, one on the face and one behind the ear, which ran on into deep, dirty ulcers, affecting the whole depth of the skin: these not amending, I recommended abstinence from all specific treatment for a time, change of air, and attention to the general health. As the weather was fine, the patient went to the coast, where he consulted a gentleman, who recommended the use of Zittman's decoction, a vapour bath daily, and a very low diet. In six days the sores had spread frightfully; the patient was so reduced that he could not stand, and a copper-coloured

mottling broke out over the whole body. A second practitioner was now consulted, who advised a full diet, three or four glasses of port wine daily, and small doses of blue pill with the hydriodate of potass: under this treatment the sores healed, and the patient recovered his health; some small scaly blotches still remained on his return to me, which disappeared under the use of the compound decoction of sarsaparilla, small doses of the bichloride of mercury, and the mercurial vapour bath.

Age, previous habits of living, and constitution, most materially modify the treatment both of primary and constitutional syphilis, especially in relation to diet and general management.

In all local and constitutional venereal affections, our first duty should be to examine the general condition of the system of the patient, to ascertain the state of the viscera of the chest and abdomen, and to place him upon such a regimen as may be most likely to diminish the irritability of the system generally, or of any one organ in particular. The bowels should be kept free by the exhibition of mild, unirritating purgatives, suited to the gastric constitution of the patient.

General bleeding may be employed as a preparatory measure, when the circulating medium of the patient is too active, or the inflammation accompanying the local disease acute, and the patient young and plethoric.

The simple treatment attaches much importance to the position of the patient, in the cure of venereal affections; hence, whenever it is practicable, the patient should be confined to bed. This has the advantage of keeping the skin warm and promoting perspiration, points of great importance, whilst the recumbent position favours the return of blood upwards through the pelvis, and tends to mitigate any inflammatory action or tendency. This position also renders the application of dressings much easier, and places the patient in a more advantageous condition for the action of remedies. In buboes, posthitis, acute or subacute gonorrhœa, ulcers on the genitals, vegetations about the anus, affections of the skin, &c., the recumbent position in bed, if not indispensable, most materially facilitates the cure.

The warm bath is a modifying agent of great utility. In a great variety of venereal affections the patient may use it daily with advantage. The hip-bath, in many cases, from the situation of the venereal affection, may supersede the necessity of immersing the whole body. The patient may be directed to remain in the

bath an hour, or two, or more, according to circumstances. Baths medicated with gelatin, starch, bran, or the decoctions of poppy, henbane, or belladonna, may be employed. General and local bleeding, low diet, aperients, the warm bath, with repose in the recumbent position, constitute the general simple treatment of syphilis; and so efficacious are these means in mitigating the irritations accompanying primitive or secondary syphilitic affections, that, of themselves, they frequently work a cure. Where a mercurial, or other specific treatment is adopted, the simple general treatment, pursued at the same time, will be found most materially to assist it, whilst by keeping the constitution in a state free from irritability, it prevents the accidents to which a mercurial course frequently gives rise.

As a good example of the mode in which the simple treatment may be employed, we may refer to the practice adopted by Dr. Roe, of the 39th regiment, as recorded in Dr. Graves' 'Clinical Medicine:' "The patients on their admission were purged with Epsom salts and tartar emetic, and were ordered to apply a piece of lint wet with a solution of the sulphate of copper to the sores, and to renew the application every third hour, using a wet linen roller to keep the parts clean, and retain the dressings. Milk diet, aperients every third day, the parts frequently bathed with cold water, particularly if pains existed in the groin. The chancres were occasionally touched with nitrate of silver, or sprinkled with red precipitate, to expedite the cure. No mercury, except as an aperient. Perfect rest in bed."

We shall now indicate some general rules for the surgical treatment of syphilitic affections, considering the particular treatment with each separate form of disease. The best antisyphilitic is frequently a dressing methodically made, it being in vain that we attend to the constitutional treatment of our patient, at the same time irritating or neglecting the local disease.

Syphilitic sores should be daily cleansed, by a soft sponge and tepid water, from the discharges which their surfaces secrete; this should be done without creating any irritation or pain, and care should be taken not to disturb any parts undergoing a process of cicatrization. Syphilitic ulcers, perhaps, more than any other kind, are liable from slight causes to become irritable, and assume a phagedenic character. The dressings to these ulcers should be of the simplest kind; mild astringent and anodyne solutions generally succeed better than the various kinds of ointments, particu-

larly those which contain mercury. The testimony of all modern authors is decisive upon this point. Strong aqueous solutions of opium, weak solutions of nitrate of silver, the sulphate of copper, port wine, and water, or the black or yellow washes made very weak, are some of the most suitable applications to primary syphilitic sores in their early stages. These generally agree better, are more convenient, and cleaner than ointments; should the latter be preferred, the Unguentum Zinci, or the Cerat. Plumbi Acetatis with or without opium, will be found proper. Sometimes cold water, or soft dry charpie, or lint, agrees better than anything else. When a primary sore becomes painful under any local application, when its secretion is increased, when it inflames, or its edges get red and hard, or the ulceration spreads in depth or extent, the local application does not agree, and must be changed.

In the treatment of almost every form of primary syphilis, more particularly that of the ulcerated kind, local bleeding by means of leeches should be adopted with extreme caution. If leeches are applied in the vicinity of an inflamed chancre, the bites will very probably become inoculated with the virus, and fresh chancres be consequently produced. If, again, as some writers recommend, leeches are applied in the centre of a venereal sore, with a view of diminishing the inflammation which surrounds it, the tissues become poisoned to the extent in which they have been divided by the bite of the leech, and hence an extension of the ulcer in depth will take place. Even in incipient bubo, swelled testicle, and other of the consecutive symptoms of primary syphilis, an extensive experience has taught us that local bleeding is not essentially attended with very marked benefit. We have other plans of treatment to recommend, less tedious and more certainly successful.

In inflammation of the testicle, and of the glands of the groin, if leeches are employed they are more efficacious placed directly upon the most painful part of the tumour, than in the course of the spermatic vessels, or around its base. M. Gama, chief surgeon to the military hospital of Val de Grace, observing the comparatively trifling effect of local bleeding on buboes, &c., as it is generally employed, practises with more success what he terms "saignée permanente." Instead of applying a large number of leeches at once, as twelve, fifteen, or more, he uses four or six, and when the bleeding begins to diminish, reapplies the same number, so as to keep up a constant flow of blood from the part for many hours.

Irritation is frequently kept up by the mere contact of two in-

flamed surfaces, notwithstanding an appropriate treatment, in all other respects, may be methodically practised; hence, certain forms of superficial primary syphilis, or of balanitis,[1] and posthitis,[2] are kept up by the contact of the glans penis and prepuce, and some gleets protracted from the contact of the two sides of the urethra. Fricke, of Hamburg, first established this fact, which has been verified in the practice of Desruelles and Ricord; the latter has frequently succeeded in curing obstinate gleets by introducing a small portion of lint into the urethra, dry, or soaked in a mild astringent solution. The prepuce and glans, when either is the seat of irritation or ulceration, should always be separated by the introduction of fine linen, or lint. The continued contact of the glans and prepuce, when inflamed or ulcerated, frequently occasions their total or partial adherence.

Parts affected with syphilis which are deeply seated, or covered by folds of integuments or mucous membrane, should be daily cleansed by tepid anodyne or astringent injections, according to the character of the accompanying irritation. These injections should be practised quietly, without force, and without creating pain.

Abscesses should be opened early, more particularly if the presence of matter occasions much pain, or take place under fasciæ or tendinous expansions, where the pus cannot readily make its way to the surface. Long and deep sinuses should be laid freely open, or if it be practicable, a counter-opening may be made.

All parts in a state of natural or acquired strangulation which offer impediments to the cure of syphilitic diseases should be quickly relieved; this becomes necessary in natural or acquired phymosis or paraphymosis. The circumstances which contra-indicate this practice will be mentioned under the article on the particular diseases themselves.

The non-mercurial, simple, or physiological treatment of syphilis, then, consists in the employment of the means already passed in review, both local and constitutional, without having recourse to mercury as a specific therapeutic agent in their cure, and this may be adopted both in the primary and secondary forms of disease. It will be found, however, that the primary are very much more easily cured than the secondary upon such a plan. It cannot be concealed, that the non-mercurial treatment does not al-

[1] Balanitis, Βαλανος, glans; inflammation of the glans penis.

[2] Posthitis, from πεσθη, preputium, inflammation of the prepuce; the term balano-posthitis, where both glans and prepuce are inflamed, is employed by some modern writers on syphilis.

ways succeed in the cure of primary syphilis; and that, in a great number of cases, the cures are more apparent than real, the sores breaking out again when the patients return to their customary diet and occupations. Matters go on very well whilst a patient is limited to a rigid diet, and confined to bed, and watched in the wards of a hospital, but in private practice this cannot be done; and hence it has been found by military surgeons, that whilst they could cure the privates, they could not cure the officers on the non-mercurial plan. In the French memoirs of military surgery,[1] the medical officers of the military hospital of Toulon state that, although the non-mercurial plan is useful in allaying the irritation, or inflammatory symptoms which accompany primary venereal sores, yet they were compelled to resort to mercury to obtain radical cures. Fifty-two surgeons met at Nantes, in July, 1835, to discuss this question: they had five discussions; two only, one of whom was M. Devergie, declared themselves in favour of the physiological, or non-mercurial treatment of syphilis.[2]

As a general rule or principle, I never employ mercury except as an aperient, in the ordinary forms or earlier stages of primary venereal sores, except such sores have been tested by inoculation, and yielded a characteristic pustule. The immediate local or specific effect of the syphilitic virus produces a degree of irritation or inflammation on the parts to which it is applied, during the continuance of which mercury is, to say the least, injurious, except as an aperient; and it is not till rest, low diet, mild opiate or astringent washes, and the other remedies just noticed, have failed in producing a cure, that mercury is to be thought of as a specific agent. When, however, all these have failed, and the case has assumed a perfectly chronic character, mercury may be used with every prospect of a beneficial result,[3] and this is certainly the result of modern experience on this subject.

[1] Recueil de Mémoires de Médecine et Chirurgie Militaires, tom. xxxv.

[2] Procès verbaux des séances tenues par les Médecins de Nantes, pour discuter la valeur des doctrines nouvelles rélativement à la nature et au traitement de la Syphilis; Nantes, 1835.

[3] Desruelles, of Val-de-Grace, concluded from observations made on 8810 patients, that the non-mercurial treatment must be considered as the base of all rational practice; "but," says he, "should the ulcers continue without disposition to heal for twenty or thirty days, mercury should be employed to effect a cure."—The same doctrines are taught by Dr. Egan, of Dublin. (Syphilitic Diseases, their Pathology, Diagnosis, and Treatment, &c., &c.; London, 1853, pp. 330–331.) And this is the result of my own experience, drawn from the personal treatment and examination of more than 25,000 patients, in hospital and private practice, during the last twenty years, many of them tabulated and noted according to the plan alluded to in the Preface.

CHAPTER II.

OF THE MERCURIAL TREATMENT OF SYPHILITIC DISEASES.

In this chapter I shall point out the circumstance which modern experience has indicated for the use of mercury; for although this remedy cannot be considered in any measure as a specific against syphilis in any of its forms, still there are numerous cases in which it is the most powerful and certain therapeutic agent we can oppose to them.

Why is mercury to be employed in the treatment of syphilis? When is it to be employed? In what manner is it to be employed? What are the states of the constitution and of the sore which are to guide us in pursuing its use or giving it up? And when is it to be discontinued? These are the practical questions which suggest themselves to us in reference to the use of mercury in venereal diseases, and to them we shall give the answers that modern experience has sanctioned.

Mercury is employed with the intention of healing a syphilitic sore, and to diminish the chance of secondary symptoms.[1] When

[1] Wallace; on the Venereal Disease and its Varieties, p. 100; Lond., 1838.

This statement requires some comment. That mercury, however administered, will not infallibly prevent secondary symptoms, is a fact as certain, as that secondary symptoms do occur. One reason why mercury is not more successful under this point of view, is owing to the manner in which it is given, and the irregularities of the patient during its exhibition. That mercury should fulfil its intentions, it is necessary that it should be employed properly and fully, or not at all. Mr. Judd's experiments show that dabbling with mercury increases the number of secondary diseases, whilst properly conducted courses have a different effect, (On Urethritis and Syphilis, p. 537;) and that its use should be limited to that description of sore which is really syphilitic, *i. e.*, that it either presents a well-marked induration, or has yielded a characteristic pustule when tested. This being settled, the mode of its administration should be considered, and the patient should be subjected to those rules of diet and regimen, which have already been laid down in the chapter on "Non-mercurial Treatment." It is owing to a neglect of these precautions that secondary diseases so frequently follow mercurial treatment, which under other circumstances would not happen. The particular modes of its employment will be considered further on.

(says Cullerier) the local applications before mentioned are insufficient to produce the cicatrization of a chancre, the patient must be placed upon a general mercurial treatment.[1] The rapidity of the complete cure of several varieties of venereal sores is enormously in favour of the mercurial treatment, whilst the number of secondary affections is, by it, much diminished.

There are several circumstances which particularly indicate the presence of mercury in primary syphilis. 1. When a sore remains long open, and shows no disposition to heal under the non-mercurial plan detailed in the last chapter. 2. When secondary symptoms appear before the primary disease is cured. 3. In well-marked indurated chancre, more especially if this have been tested by inoculation.[2] 4. In all primary sores which have yielded a characteristic pustule by inoculation; the indications for the employment of mercury in the two last-mentioned classes of cases is still more pressing, if the primary sores be accompanied by bubo.[3] 5. In certain cases of rapidly spreading ulceration, hereafter to be described.

Mercury is not to be used during a state of fever or local inflammation which is present during the first days of venereal ulcers, nor till our patient is prepared for it by appropriate diet and medicines. When the fever and local inflammation or irritation which commonly attend primary venereal sores are removed, when the process of ulceration has stopped, and the sore remains indolent

[1] Recherches pratiques sur la Thérapeutique de la Syphilis, ouvrage fondé sur les observations recueillés dans le service, et sous les yeux de M. Cullerier, par Lucas Championnière; Paris, 1836.

[2] The term induration, as limited to a primary sore, is to be understood to mean a cartilaginous hardness of a whitish colour which immediately surrounds the sore, on the top of which the ulcer is sometimes seated, or in which it is dug out, the redness or inflammation accompanying the one is generally on the outside of this white hardness, which is movable under the skin; this appearance of induration sometimes does not come on at first, but makes its appearance during the progress of a sore, and in other instances the induration appears on the site of the cicatrix after the sore has healed, but under which circumstances it is prone to ulcerate again. Specific induration must not be confounded with the swelling, œdema, or inflammation which accompany other ulcers of the penis, nor again with a thickened condition of the edges of a sore, which is frequently produced by improper local treatment, or appears when simple ulcers become indolent.

[3] "In such cases," says M. Ricord, "six months never elapse without secondary symptoms manifesting themselves, unless a specific treatment be employed." It is also the experience of M. Puche, who has verified its truth in hundreds of instances, without an exceptional case. "This is a universal law which there is no means of eluding, but by mercurial treatment." (See Ricord's Letters, by Stapleton, p. 51.)

under the use of topical applications; above all, when its edges are elevated and hard, mercury may be employed with the full expectation of realizing its most beneficial results.

When a certain degree of induration accompanies a chancre, or persists after its apparent cure, recourse may be had to mercury, and, "as the mineral is frequently injurious in some other forms of syphilis, so it is of use here." Mercury may be employed in the absence of fever and local inflammation, when the sore has become indolent, and puts on no disposition to heal under ordinary local dressings. Dr. Wallace resorted to mercury, in most cases of primary venereal sores, when the process of ulceration has been arrested by the nitrate of silver, or other caustics, when the sore had become indolent, or not assumed a disposition to heal. This author, recognising the grand principles above detailed, that we are not to employ mercury in the earlier stages of chancre, whilst the constitution and sore are irritable and are still suffering from the more immediate effects of the venereal poison, says "great mischief frequently results from the topical employment of mercury, as well as other stimulants, during the stage of ulceration or destruction of primary syphilis, by producing morbid excitement followed sometimes by indolent and sometimes by irritable action, with their concomitants and consequences. The most appalling forms of this disease, which ever came under my observation, were caused by the injudicious application of the red precipitate, or other powerfully stimulating dressings, and it has therefore long been a principle with me strictly to avoid all mercurial and stimulating dressings during the ulcerating stage of syphilis. It is also in general highly improper to administer mercury internally during this stage; for if used at this period it may, instead of producing a salutary and specific influence, increase the inflammation, or excite a state of irritable or indolent action, after which the system will become quite insensible to ordinary doses of this medicine; and if under such circumstances larger doses of mercury be employed, a peculiar and complex state will most probably result, determined in its character by the combined influence of the disease, the remedy, and the constitution of the patient, a state in which mercury acts as a poison, or in other words not only aggravates all the symptoms, but perhaps excites a new train of peculiar morbid action."[1]

In what manner is mercury to be employed, when indicated by

[1] Op. cit., pp. 109-110.

the before-mentioned conditions? It may be used in three ways: by internal administration, by friction, or moist fumigation. I have little faith in the internal administration of mercury alone for the fulfilment of the intentions just stated, and never depend on it alone, unless combined with the moist mercurial fume. "You may patch up the disease," says Sir B. Brodie,[1] "by giving the remedy internally, but it will return over and over again." The advantages of administering mercury by the mouth are the facility with which such a plan may be followed, this, however, being vastly counterbalanced by its disadvantages, which are, the uncertainty of its result and its operation on the patient; it is more commonly followed or accompanied by the evil effects of mercury, and less frequently followed by the cure of the disease than the other methods. In this country the Hydrargyrum c. Cretâ, the Pil. Hyd., or the Chloride of Mercury, are the remedies generally used. On the continent the Bichloride and the Biniodide.[2]

The treatment by friction is much more certain than by the internal administration of mercury. This method consists in rubbing in before the fire each night, till the proper effect is produced, from a scruple to a drachm of the stronger Mercurial Ointment. These frictions may be made on the inside of the thighs, in the popliteal space, on the soles of the feet, or in the axillæ. Frictions in the axillæ are of service in obstinate ulcerations of the throat. I very frequently employ them with complete success in this situation. Cullerier records the histories of two cases cured by mercurial friction in the axillæ, which had resisted its employment in other parts. Sir B. Brodie (Lectures on Pathology and Surgery, p. 243,) prefers this method, which was that of the late Mr. Pearson of the Lock Hospital, to all others; he believes that surgeons have gone back in their treatment of syphilis. Mr. Hunt (On Syphilitic Eruptions with especial reference to the use of Mercury) is of the same opinion. In reference to the treatment of infantile syphilis,[3] it is clear that frictions are much more safe and efficacious than treatment by the mouth. "Very few of those children ultimately recover to whom mercury has been given internally; but I have not seen a single case in which the other method of treatment has failed."[4] The frictions must be continued every

[1] Lectures on Pathology and Surgery, p. 242.

[2] See the Chapter "On the Employment of particular Preparations of Mercury," for details on these points.

[3] See the Chapter on this subject.

[4] Sir B. Brodie; op. cit., p. 245.

night, or every other night till the gums swell, and the secretion of saliva is slightly increased; the intervals between the frictions must then be lengthened, but the effect kept up till sometime after the sore has healed, and its specific induration gone. We cannot, with Chelius[1] and others, limit the number of frictions to nine, or twelve, or any specific number; they must be continued till the effects above mentioned are produced. That mercurial treatment by friction or by the mouth should succeed, it is absolutely essential that the patient should be confined to a warm room, and if possible to bed; exposure during a mercurial course sometimes entirely destroys the effect of the remedy. It is owing to an observance of these rules that patients in the hospital get cured, who are made to observe them, whilst private patients who neglect them or cannot observe them, are not so fortunate. The diet during this treatment should be light, nutritious, and unstimulating; the older and more weakly the patient the better the diet; should he be young and plethoric, he should combine the hunger cure with the frictions. The treatment by friction is milder, safer, and more certain than that by the internal administration of mercury; but it is liable occasionally, though not so frequently, to produce the evils already alluded to when speaking of the use of that class of remedies. In certain cases, frictions of different preparations of mercury have been made on the gums and upon the tongue. I have tried them, but at best with little success.

Mercury, when indicated in the treatment of venereal diseases, may be employed by way of fumigation, in the manner alluded to by me in the second edition of this work, and more fully detailed in a separate publication in 1850.[2] There is no doubt but that the dry method of fumigation, introduced by Lalouette in 1786,[3] and subsequently practised both in this country and on the continent, was exceedingly efficacious in the treatment of a great number of venereal diseases intractable or incurable under ordinary methods.[4]

[1] A System of Surgery, by J. F. South.

[2] On the Treatment of Secondary Syphilis, &c.; Churchill, 1850.

[3] Nouvelle methode de traiter les Maladies vénériennes, &c.; Paris, 1776, publiée par ordre du roi.

[4] "I have reason to speak in the highest terms of the Cinnabar fumigation, which I have never found to fail in arresting the rapid ulceration that we often find so formidable in the throat and on the penis; usually one or two applications are sufficient to change entirely the character of the sores, and to convert the destructive state into a process of healing." (Mr. Vincent's Surgical Observations, p. 350.)

"So late as the year 1814, it was the practice in Stockholm, to heal primary symp-

The old manner of applying it, however, by vaporising the mercury from a heated piece of iron or hot cinders, was so uncertain that sometimes no effect was produced, at others too much. The plan which I suggested of vaporising the mercury from a tin plate by the heat of a large spirit lamp, and mixing it with a small quantity of common steam, so that the patient is exposed to a gradually increasing temperature, divests fumigation of all its antecedent evils; and I believe when this method is combined with the internal administration of very small doses of this remedy, that this is by far the least hurtful, and most certain way of employing mercury that can be adopted.[1]

In a great number of primary diseases I prefer the treatment by fumigation, combined with the internal administration of a twentieth of a grain dose of the Bichloride or Biniodide, and a milk diet. In indurated chancre and primary phagedenic sores, the treatment does not fail, neither is it attended with accidents, such as diarrhœa or salivation, once in a hundred times; it is as certain and as little hurtful as any treatment can possibly be.

Between the years 1846 and 1850 I personally treated fifty-eight cases of indurated chancre in this way; none of the patients were confined by the treatment, though I admit this would have been better could it have been accomplished, but in a great majority of syphilitic cases this is impossible; it is therefore our duty to frame some treatment that will be efficacious without such an important auxiliary. Diet can be observed, but rest in bed or confinement to a warm room cannot with a great mass of private patients. One case only out of the fifty-eight, up to the present period, has been followed by secondary symptoms, and that in the form of slight lepra with superficial ulceration of the throat, which occurred in

toms by most free inunction, and under this system, it was calculated that the number of cases of secondary affection of the bone was no less than 54 per cent. In 1814 this treatment was changed, and a milder method adopted, *by fumigations* and by diet; and the result is stated to have been so eminently successful, that the College of Health reported that the cases of diseased bones were reduced from the large number mentioned to about 6½ per cent. It is also added, as a consequence, that, instead of there being six hospitals for the reception of venereal patients, there is now only one in all Stockholm." (Williams' Elements of Medicine, vol. ii. p. 134, quoted in "Brit. and For. Medico-Chirurgical Review," No. 18, July, 1851.)

[1] "Mr. Langston Parker's work certainly contains strong evidence in favour of the merits and the advantages of this method over any other mode of obtaining the therapeutic effects of mercury in this disease." (Edinburgh Medical and Surgical Journal, No. 193, October, 1852.)

three months after the primary disease. In five of these cases the sores were situated at the orifice of the urethra, and in one accompanied also by phymosis, the glans and prepuce were as hard as a scirrhous mamma; nevertheless the cure was perfect and the health unimpaired, although the patient was nearly 50 years of age.

In primary ulcerative (not sloughing) phagedena, I have not as yet seen one single instance of failure. Salivation rarely accompanies treatment by moist fumigation, and this is prevented by the profuse sweating which the process occasions. If patients use an ordinary vapour bath whilst taking mercury internally, or employing it by friction, salivation very rarely takes place.

During the employment of mercury, the states of the sore, of the constitution, of the mouth and breath, are to be carefully watched, since each of them may assume certain conditions which would render the further use of mercury injurious.

The state of the sore whilst the patient is taking mercury should be frequently examined, and topical applications suited to its condition employed. At one time it may require anodynes, at another astringents, or again slightly stimulating applications may become necessary. During the mercurial course, also, the diet should be mild and unstimulating, and the condition of the stomach and bowels carefully attended to. Dr. Wallace recommends the mastication and deglutition of grains of allspice or pepper during the day, and covering the abdomen with two or three folds of flannel. A nightly draught or pill of some preparation of opium with capsicum[1] may be employed with advantage, even during the period the patient is using mercurial frictions; the former not only prevent those attacks of pain, griping, and diarrhœa, which sometimes come on during a mercurial course, and materially retard the healing process, but they contribute directly to the therapeutic effects of the mercury.

It is from a want of attention to these circumstances that persons are so frequently placed upon the mercurial plan without being cured. This arises from their neglecting the modifications of to-

[1] ℞. Pulv. opii, gr. j;
Pulv. capsici, gr. ij;
Conf. aromat. q. s. ft. Pil.
Omni nocte sumend.
or,
℞. Liq. opii sedativ., ♏ xx ad xxx;
Tinct. capsici, ♏ xxx ad l;
Aquæ cinnamomi, ℥j. M. ft. Haust. h. s. s.

pical applications, and not observing the dietetic regimen suited to their state.

The condition of the sore is very frequently an indication of the effect of mercury upon the constitution, and points out clearly whether it is agreeing with the system or not. From this circumstance, we recommend a frequent examination of the local disease during the time the patient is using mercury. "It will be found a most important rule in practice to omit all mercurial treatment whenever there appears an increase of inflammation or sensibility to arise in the local disease during the employment of mercury; for a perseverance in its use, under such circumstances, will almost inevitably tend to some destructive action, determined in its character by the constitution of the patient. In such cases we must have recourse to emollient and anodyne applications, purgatives, rest, abstinence, and diaphoretics, with or without narcotics, and, as soon as the morbid actions which have supervened have been removed, mercury if necessary may be again resumed, to be suspended afresh in case of a return either of inflammation or irritability."[1]

The state of the constitution as well as of the sore demands great watchfulness during the administration of mercury for the cure of primary venereal sores. It is quite certain that venereal sores which have resisted all other modes of treatment daily heal under the use of mercury, whilst the remedy produces no sensible effect upon the economy either by causing salivation or mercurial fever, more especially when moist fumigation is used. We therefore insist upon the principle, that the greater the degree of excitement or of deviation from the healthy condition of any of the functions of the body which mercury produces, the greater is the danger of its action being followed by deleterious effects, or of its ceasing to influence in a salutary manner the symptoms of syphilis.

It is not necessary that mercury should produce salivation in order that its benefits, in curing primary syphilitic ulcers or diminishing the chance of secondary symptoms, may be realized. What, then, are the rules to guide us in these circumstances? How long is our patient to be submitted to the use of mercury, and when is it to be discontinued? Is the healing of the sore without a thickened condition of the cicatrix our rule for the discontinuance of mercury? I think not; the disappearance of a symptom is not the cure of a disease; and, as M. Ricord has very justly observed, "that to continue specific treatment only until the symptoms disappear is

[1] Wallace; op. cit., p. 119.

the method by which we may be almost sure of their return." A change in the form of mercurial remedy exhibited is frequently very efficacious, particularly in syphilitic diseases of the skin, or in rebellious forms of ulceration. I have seen the mercurial fume bath succeed after a complete treatment by inunction and blue pill had failed, and the Bichloride in small doses beneficial, when blue pill and calomel had been taken without success. "A gentleman was treated by me for a scaly eruption, which yielded in three weeks to the moist fumigation. At this period some large red blotches appeared on the face and abdomen, which ran into foul sores. The vapour had no effect on them; but they yielded quickly to small doses of blue pill and the iodide of potass. These had hardly healed when a second scaly eruption made its appearance, different in character to the first, which spread under the use of blue pill and iodide of potass, but which very quickly disappeared when the vapour, with one-twentieth of a grain dose of the Bichloride was used. No return of symptoms since." The old rule was to continue the remedy, after the disappearance of the symptoms, for as long a period as it had taken to cause the disappearance of them; this, though not infallible, is certainly not a bad guide in practice. Salivation certainly is not a test of the eradication of disease, and, if it occur suddenly or prematurely, rather gives promise than the reverse of a secondary attack. In fact, there is no certain rule that can be laid down on this point. The late Dr. Colles inculcated that mercury should be continued for a few days after all hardness of the cicatrix had been removed, and thinks moderate ptyalism should be kept up for a month. Mr. Judd mentions twenty-five to thirty days; M. Ricord advises a "daily dose to produce a sensible or physiological effect for six months." This is certainly wrong: the constitution becomes habituated to a remedy persevered in in this manner, and I have occasionally seen a fresh outbreak occur during a prolonged course of this kind. As it has been incontestably proved by the observations of all writers on syphilis, that secondary symptoms will occur in certain cases and constitutions, whatever mode of treatment be adopted for the cure of the primary sore, it must be clearly evident that it cannot be logical practice to submit a patient, from whom all symptoms have disappeared, to the influence of a mercurial treatment for a long period of time, to eradicate a disease the existence of which is conjectural; whilst on the one hand there are no symptoms to combat, and on the other, if the poison be latent, we have no data to prove

that such a treatment will destroy it. The rule I invariably act upon is to continue the specific remedy for two or three weeks after the primary disease has disappeared, with all induration of the cicatrix; to advise the patient when he leaves me to live regularly, take a smart aperient from time to time, a vapour bath once or twice a week; and to avoid all causes, such as cold, &c., which are likely to interfere with the general health, since it has been shown by Cazenave[1] and others that accidental causes affecting the general health very frequently determine an outbreak of syphilis, and hence in confirmed cases regular attacks occasionally supervene in spring and autumn.

The state of the mouth should be carefully examined before resorting to a course of mercury; sometimes a stomatitis may be present before the administration of this remedy, and we might thus be deceived in its effect, mistaking the inflammation of the mouth, which was previously in existence, for one which is the result of mercury. It is quite certain that many morbid conditions of the mouth and breath so closely resemble those produced by mercury that, without an examination of the mouth before resorting to a mercurial course, we might be led into great error.

When the breath becomes fetid, and the gums tender, the mercury must be discontinued, or very much diminished in quantity. The patients should use slight astringent gargles, with mineral acids, and lozenges of the chloride of lime.[2]

M. Desruelles, surgeon to the military hospital of Val de Grace,

[1] Traité des Syphilides; Causes des Syphilides, p. 529.—See also a remarkable case, and the remarks on it by Sir B. Brodie, (Lectures on Pathology and Surgery, p. 247,) which fully bear out what I have said on this subject.

[2] ℞. Sodæ chlorid. solutionis (Beaufoy's;)
Tinct. myrrhæ āā ℥ss;
Aquæ, ℥v. M. ft. garg.

℞. Aquæ destillatæ, ℥vij;
Aluminis et potassæ sulph., ℈ij;
Mellis rosarum, ℥j. M. ft. garg.

Lozenges of Chloride of Lime.—
Calcis chlorid., ℥iv;
Sacchar. alb., ℔. j;
Amyli, ℥iv;
P. gum. tragacanthæ, ℥ij.
M. Aquæ aurantii quantum sufficit.

The mass is to be made into lozenges of three grains each. Their use principally in removing the mercurial fetor of the breath.

having the charge of the venereal department of that establishment, and a partisan of the simplest or physiological treatment of syphilis without mercury, entertains the following opinions as to its use, and gives certain rules for its exhibition. Certain chancres, says he, of a phagedenic or Hunterian character with a hard base, which leave behind them in healing an indurating cicatrix, are more frequently followed by secondary symptoms, when treated without mercury, than if this remedy had been given.

When venereal sores become stationary, or do not heal under the simple treatment, and the exhibition of mercury is not contra-indicated by the inflammatory or irritable condition of the sore, or certain states of the constitution, mercury may be advantageously used. Mercury is not to be employed when any of the viscera present symptoms of irritation, when the patient applies immediately after having contracted his disease, or when the sore heals quickly under the simple treatment.

Mercury may be given when the local inflammation accompanying a venereal sore has been subdued, and the patient is prepared for its exhibition by diet and aperients, the sore remaining indolent, of a bad aspect, and not healing or appearing to be influenced by the simple treatment. This remedy may be also employed if the sores are complicated with inflammation or enlargement of the glands of the groin, or if any affection of the skin, as papular or other eruptions, make their appearance during the simple treatment, and there is reason to believe the constitution affected.

In many secondary affections, although generally trusting to the simple treatment, Desruelles thinks the employment of mercury, particularly of the iodide, may be of service. He merely states that if secondary symptoms appear in an individual who has for the primary form of the disease been treated fully by mercury, it is better to employ the simple treatment, sudorifics, and attention to the general health, than to have recourse again to the employment of mercury. In secondary syphilis, which succeeds to a primary affection treated without mercury, this remedy is almost always necessary. A mild mercurial course in such instances is generally more efficacious than any other.

CHAPTER III.

ON INOCULATION, AS APPLIED TO THE DIAGNOSIS AND TREATMENT OF SYPHILITIC DISEASES.

BOTH before and since the time of Hunter inoculation has been employed for the purpose of testing the character of syphilitic diseases; and at the present day M. Ricord has deduced from an extended series of experiments certain conclusions of great value and importance, which he has given to the world in his great work, 'Traité pratique des Maladies vénériennes, ou Recherches critiques et expérimentales sur l'Inoculation, appliquée á l'étude de ces maladies.'[1]

M. Ricord establishes, in the first place, that a chancre, wherever it may be seated, is produced by a specific matter which is secreted by a chancre only, which matter produces a similar contagion.

This specific matter is only secreted from the surface of a chancre during its first stage, that is, during the period of ulceration, or when the sore is indolent or stationary. At these periods only does a chancre secrete a specific matter capable of producing a similar disease by inoculation. When the sore begins to heal and a process of reparation has commenced, it is merely a simple ulcer, does not furnish a specific secretion, and is not capable of propagation by inoculation.[2]

If matter be taken from a chancre during the period of ulceration, and introduced under the epidermis by means of a lancet, it produces the following effects: During the first twenty-four hours the puncture becomes more or less inflamed; from the second to the third day it is accompanied with slight tumefaction, and presents the appearance of a small papula surrounded with a red areola;

[1] Paris, 1838.

[2] It would appear that these views were likewise entertained by Dr. Wallace, who divides chancre into two distinct stages or phases, the first one of ulceration, the second one of reparation; he particularly insists upon the impropriety and danger of administering mercury during the first stage, that of ulceration.

from the third to the fourth day the disease assumes a vesicular form, the epidermis being raised by a fluid more or less opake, presenting at its apex a small dark point; from the fourth to the fifth day the contents of the vesicle become purulent, the apex of the pustule depressed, resembling very much the pustule of small-pox. At this period the areola, which had progressively increased, begins to diminish or altogether disappears, particularly if the disease does not increase: after the fifth day, however, the subjacent and surrounding tissues, which hitherto had undergone little or no modification, or were merely slightly œdematous, become indurated by the extravasation of a plastic lymph, which communicates to the touch the resistance and elasticity of cartilage. After the sixth day the contents of the pustule thicken, the pustule itself shrivels up, and is covered with crusts. These enlarge towards their base, and forming by successive strata, at length assume the form of a truncated cone with a depressed apex. If these crusts are detached, or if they fall off, we find under them an ulcer with the hard base of which we have spoken, extending through the whole thickness of the skin. The surface of this ulcer, of a deep red colour, is foul, covered with a thick adhesive pultaceous matter, almost like a false membrane, which cannot be removed by any attempt to clean the sore. The edges of the ulceration at this period appear as though it had been dug out from the surrounding parts by a sharp circular instrument. The immediate vicinity of the sore is surrounded by a red, dark, or livid margin, more elevated than the surrounding parts,

Such is the regular course which the inoculation of the syphilitic virus generally runs, when the inoculation is positive; but do all sores, which from their aspect and history we should repute syphilitic, invariably yield a characteristic when inoculated or run the course described? They do not. The indurated chancre, I may say, invariably does this; but other sores undoubtedly syphilitic, proved by the secondary diseases to which they have given rise, do not very frequently yield any result when tested by inoculation; and at other times, when the result is positive, they do not always run the course indicated; at other times the pustule shrivels up, and dies off in three or four days, or again an irregular abscess forms. All these effects I have repeatedly verified and shown in the wards of the Queen's Hospital. I have never seen any reason to change the opinion I gave on this subject in the second edition

of this work, and which I am much gratified to see quoted and supported by Dr. Egan, of Dublin.[1]

Inoculation is only valuable when positive, and I must caution the young surgeon against assuring his patient, that his primary disease will not be followed by a constitutional taint, because it has not yielded a characteristic pustule when inoculated. That inoculation should succeed it should be carefully performed. I always raise the epidermis with a new or carefully cleansed lancet, and introduce the virus on the tip of a new vaccine point; this should be done two or three times, if the first puncture does not succeed. Primary venereal sores of a phagedenic character should never be inoculated.

The ulcerations completely destroyed or arrested on the third, fourth or fifth day from the application of poison are not liable to secondary inflammation. It is not before the fifth day that the induration of chancres commonly commences, and it is the indurated chancre that is most frequently followed by secondary symptoms; this induration seems to indicate that the affection has become in some measure already constitutional; as long as there is no induration we may suppose the disease to be merely local.

The varied appearance which primary venereal sores present (says M. Ricord) has given rise to arguments against the identity of the venereal virus, and has led to the promulgation of the theory of a plurality of venereal poisons. Inoculation, however, sets this matter at rest, for whatever may be the actual character of the sore from which we take the pus, provided it be taken during the first stage of chancre, that of ulceration or indolence, we obtain by inoculation when successful a regular pustule when the matter is introduced beneath the epidermis or epithelium; an ulcer when it is applied to a denuded surface; and an abscess when introduced into the cellular tissue, or into the lymphatic system.

The various characters of chancres or primary venereal sores, are due to circumstances which are foreign to the specific cause which produced them; these are principally the particular constitution of the patient, his mode of living, the influence of any antecedent or present disease with which he may happen to be affected, the situation, and not least the local treatment of the sore. It is from one or many of these circumstances that we see phagedenic ulcers in subjects who have contracted their disease from others affected with ulcers of the simplest character.

[1] See his work already quoted, p. 27.

The first stage of chancre, *i. e.* of ulceration or indolence, is the only one during which the disease is susceptible of propagation by inoculation; the period of this stage is not limited, but may extend over a long period of time, frequently many months.

The researches of M. Ricord on the nature and differential diagnosis of buboes are of equal interest with those which we have detailed on the subject of primary sores. According to this author, buboes are of two kinds, simply inflammatory or virulent: in the first instance, succeeding to gonorrhœa, balanitis or any other primitive affection; and in the second, from the consequences of the direct absorption of specific matter from a chancre. To the pathology of bubo we shall return in the chapter particularly devoted to its consideration, in this place merely detailing the results obtained by inoculation from buboes in a condition of ulceration.

M. Ricord deduces from his experiments upon buboes in a condition of ulceration the following conclusions: that a virulent bubo, or one resulting from the absorption of the specific pus from a chancre, is a disease precisely similar to chancre, merely differing from it in its seat, and the anatomical organization of the parts affected; that this species of bubo is the only one capable of producing a pustule by inoculation; that the symptoms hitherto indicated by authors, with the view of establishing the differential diagnosis between a true virulent bubo and one merely inflammatory, are of little value, inoculation being the only certain and pathognomonic sign.

It must be evident, and indeed the fact has been admitted by all observers, that very few buboes can be inoculated in proportion to the number of the primary venereal sores that are followed by such a result. The late Dr. Wallace, of Dublin, is said to have succeeded only three times in many hundred experiments. Dr. Egan, also, frequently failed in producing the characteristic pustule; the same has happened to myself, and must have done to all other surgeons who have tested buboes in this way. Whether we test the pus that first escapes when a bubo is opened, or that from the bottom of the abscess "the deeper layer," the result is in many instances negative, and yet the bubo may be of a purely syphilitic character. This may be very easily explained by the fact, that the virus absorbed from the chancre by the lymphatics is modified in its passage through them, and the first lymphatic gland or glands they enter, by becoming mixed with the ordinary products and contents of the gland itself. The virus acts as an irritant on the lining

membrane of the lymphatics, which causes them to swell and inflame whilst the morbid poison is passing through them. "On examining glands which become enlarged from the result of irritation from a neighbouring ulcer, we find them to be soft, and readily yield on section, a dirty, turbid fluid. If we examine this fluid under a magnifying power of 250 diameters, we find it to be crowded with the cell elements of the gland, some of which are considerably enlarged. It would appear, that under these circumstances, the cell elements not only increase in number, but that some of the latter assume a power of development which they never present in a state of health."[1] If this condition go on to suppuration, the specific irritant must be so mixed up with pus and the altered secretions of the gland, as to be with difficulty met with sufficiently pure to produce a characteristic syphilitic pustule when tested by inoculation; and this is the true explanation why syphilitic buboes are not so frequently inoculable as primary sores; here, as in primary sores, inoculation is only of value when positive. Let no man say a bubo is not syphilitic because it cannot be inoculated.

With reference to the test of inoculation itself, some degree of difference of opinion exists. Whenever inflammation and suppuration of the cellular tissue, or lymphatic glands of the groin, is owing to any other cause than the occurrence of chancre, the pus secreted furnishes no result from inoculation, at whatever periods and under whatever circumstances the test may be made. Neither does it follow, of necessity, that buboes succeeding to true chancres will furnish a specific pus; and consequently, by inoculation, a characteristic pustule. That this may occur, it is necessary that the bubo shall not merely be owing to a simple sympathetic inflammation, but that actual absorption of the specific matter of the chancre shall have taken place. When absorption of the matter from a chancre on the genitals takes place, it is generally confined to the superficial glands of the groin; and most frequently the syphilitic poison is conveyed to one gland only, although many of the glands in the immediate vicinity of the latter, both superficial and deep seated, are inflamed, and suppurate at the same time, so that the matter taken from one gland shall be purely syphilitic, and give rise, by inoculation, to the characteristic pustule, while

[1] Leucocythemia, or white-cell-blood, in relation to the Physiology and Pathology of the Lymphatic Glandular System, by John Hughes Bennett, M. D.; Edinburgh, 1852.

those in its immediate neighbourhood shall be affected by simple phlegmonoid inflammation, the pus from which shall, when tested by inoculation, give a négative result.[1]

It may be very readily conceived that the irritation produced by the passage of the syphilitic poison through a lymphatic vessel and ganglion may excite in the neighbouring organs an inflammation which is not specific, but merely phlegmonous, and this appears to be the true nature of the case. M. Ricord opened a bubo which had succeeded to a chancre, the pus from which produced no result by inoculation. In the centre of the abscess he discovered an enlarged lymphatic gland, presenting an evident fluctuation; this was punctured and tested by inoculation, the characteristic pustule of chancre was obtained.

Discharges from the urethra are of two kinds, resulting either from the existence of a true syphilitic ulcer in some part of the passage, or owing to gonorrhœa properly so called. Chancres, or syphilitic ulcers of the urethra, to the consideration of which we shall return in a particular article, are in all respects, except situation, of the same character as other primary sores, and give rise to the same results when the matter is tested by inoculation.

The matter of gonorrhœa, applied upon a mucous surface, produces an inflammation and discharge of the same character. In no instance can it produce a true syphilitic sore, although by remaining in contact with a mucous surface for a certain period of time it may occasion a greater or less degree of excoriation, but is not capable of producing a specific ulcer, as the researches of Ricord,[2] Hernandez,[3] Dr. Egan, and myself incontestably prove.

The diseases which are consecutive to gonorrhœa, as sympathetic buboes, &c., do not secrete pus capable of producing a specific ulcer by inoculation, neither do secondary or constitutional symptoms generally succeed to a simple gonorrhœa.[4] M. Ricord thinks that in the rare cases where secondary symptoms have been said to have followed a simple gonorrhœa, that the diagnosis of the primitive

[1] See Ricord; op. cit., pp. 142 et suivantes.

[2] Mémoires, sur quelques Faits observés à l'Hôpital des Vénériens, par P. Ricord. Mémoires de l'Académie Royale de Médecine, tome 2me.

[3] Essai analytique sur la Nonidentité du Virus gonorrhöique et syphilitique par J. F. Hernandez; Toulon, 1812.

[4] Such is M. Ricord's statement. Secondary symptoms of mild character do succeed to discharges from the urethra, where there is no reason to suspect the existence of ulceration. We shall in subsequent pages have to instance some examples of this.

disease has been inexact, that the diseased surfaces have not been properly examined, and the cases have been concealed chancres of the urethra, and not gonorrhœa. It is also extremely probable that such were the forms of disease which embarrassed Dr. Wallace, who says that he had met with some forms of discharges from the urethra which were beneficially influenced by mercury, and which he was unable to cure without its exhibition.

The pus of gonorrhœa, tested by inoculation, gives no result: it may be followed by inflammation, but never produces a specific sore; injected into the urethra, it produces a disease like that of which it is the product; applied externally between the glands and prepuce, it occasions inflammation and discharge, balanitis, or external gonorrhœa; a similar effect follows its application upon other mucous surfaces.

We would here inquire what is the real position inoculation occupies in reference to the therapeutics of primary syphilis. Inoculation, pushed to its greatest extent by M. Ricord, has proved, beyond a question, the fact which English surgeons had always acted upon, though, we must admit, not upon such good grounds as they do now, that syphilis is a specific disease, and not the result of the ordinary forms of irritation. M. Ricord has proved that certain sores, when tested by inoculation, produce a pustule running through certain stages, and terminating in a specific ulcer capable of being propagated, *ad infinitum*, by the same means. It has, however, only been shown that certain ulcers produce a characteristic pustule by inoculation, and therefore should be those only which are truly specific; yet we find other sores, the result of sexual intercourse, succeeded by secondary symptoms of the worst kind, and also yielding magically, in some instances, to mercury when all other remedies had failed, the old Hunterian test of true syphilis.

In the present state of science all we can say is, that certain ulcers, the result of sexual intercourse, and not distinguishable, by their external characters from other ulcers, equally the result of sexual intercourse, yield a characteristic pustule by inoculation; but the ulcers which do not yield the characteristic pustule are equally liable to be followed by secondary symptoms, and are equally benefited, under many circumstances, by mercury.

The results of inoculation in all forms of secondary or constitutional diseases have led to the opinion that the pus of a constitutional syphilitic sore is not inoculable: that it is not generally so may be demonstrated any day in a large hospital; but, if not ino-

culable, generally, is secondary syphilis never contagious? does it never pass from the diseased to the healthy body without the intervention of primary disease? It certainly does. I have seen and treated several cases of this kind where a secondary disease, and no primary, has been communicated to the wife by the husband. Biett, Cazenave, Lagneau, names of the highest authority on this subject, have recorded examples. Lagneau records the case of an infant to whom pustular syphilis was communicated, who slept beside its mother suffering from a similar disease. Biett gives a very similar instance. Three very instructive and well-observed cases have been published by Dr. Stark.[1] Todd[2] mentions the case of an old woman of seventy, who spoonfed her grandchild, which was affected with syphilis, and died a fortnight after birth. Three days after the woman had a rash on her arms, then excrescences on the labia, elevated blotches on the breast and back, and an ulcer on each tonsil. She speedily recovered under mercurial treatment. This case is referred to by Mr. South in his translation of Chelius' Surgery.

Case III.

Syphilitic lepra, with alopecia in the husband; the same disease communicated to the wife; cure of both by moist-mercurial vapour.

A gentleman contracted a superficial primary sore, which healed without leaving a mark or induration behind it. Being apparently in good health, he married. Three or four months after his marriage he perceived on his body numerous red, smooth, elevated scaly blotches; very shortly his wife broke out with an eruption of similar character; and the hair came off rapidly in both patients. In this state they were sent to me. Neither had any primary disease, and the lady had never had the slightest irritation in the genito-urinary organs. I examined them both frequently and carefully, and I am positive the wife had never suffered from sore, excoriation, or discharge. I placed them both on a rigid diet, and the use of the moist vapour of the bisulphuret of mercury. In about six weeks they were both apparently well, and have remained so for three years.

Case IV.

A gentleman, who had suffered both from primary and secondary syphilis, married, after having been free from all symptoms

[1] Edinb. Medical and Surgical Journal, April, 1851, p. 365; cases which appear to prove that secondary syphilis is capable of being communicated to the Healthy, by James Stark, M. D.

[2] Dublin Hospital Reports, vol. ii. p. 182.

for twelve months. Soon after this he had another eruption and sore throat; his wife became affected with the same eruption, excavated ulcers of the tonsils, and was prematurely delivered of a dead child in the sixth month of her pregnancy. Both patients lost their hair and eyebrows. On account of the obstinacy of some of the symptoms in both these cases, they were sent to me from a distance to be treated by the moist vapour of mercury, under the use of which they both perfectly recovered. In this case the lady was more than once carefully examined: she was free from all evidence of any form of primary disease, and never had suffered from the least irritation in the parts.

There can be no doubt that in both these instances the secondary taint was communicated from the husband to the wife. It will be remarked that both were affected precisely with the same symptoms, both had the same character of skin disease, and both lost their hair and eyebrows, a very strong conviction to my mind of the mode of contagion. If the husband communicate a primary disease to the wife, and the primary disease in both be followed by secondary symptoms, it amounts almost to a certainty that the symptoms which accompany the constitutional taint will differ in each; but where secondary diseases are communicated they are generally, as far as the skin is concerned, alike, as the two cases detailed sufficiently prove, and as Dr. Wallace had already remarked, that all forms of syphilis produce their like.

In illustration of the first proposition of the constitutional symptoms being different, when primary diseases are communicated, I bring forward a case.

Case V.

A man, S. H—, and his wife, were admitted into the Queen's Hospital at the same time, under my care, for a syphilitic eruption on each. The husband had a papular eruption, the true venereal lichen, and the wife a well-marked pustular disease. Twenty-three weeks before their admission the husband contracted chancre, and three weeks after his wife had primary symptoms, an ulcer on the inside of the right labia, with redness and tumefaction of the os uteri.

The husband here contracts primary disease, followed by secondary disease in the form of a papular eruption; he communicates the primary disease to his wife, who suffers from a pustular eruption. If he had communicated the secondary form, her skin disease would also have been papular.

M. Cazenave, whilst admitting the rarity of the contagion of

secondary symptoms, says, "that it is impossible to deny its occurrence, but that certain local circumstances are indispensable to such a result, these are a humid or moist secreting surface and prolonged contact," (Traité des Syphilides, p. 385;) and hence we see that these conditions are fulfilled in persons habitually sleeping together, as husband and wife, mother and child, &c. &c. Whilst these secondary symptoms are rarely capable of propagation by inoculation, they are frequently contagious under the circumstances mentioned, which the facts adduced sufficiently prove.

From these facts I make a few simple deductions, which young surgeons would do well to note.

1. That it is wrong for one person affected with a secondary venereal taint to sleep with a healthy individual, especially if the former be affected with a form of disease in which there is a breach of the surface. This remark applies to husband and wife, and diseased children and healthy nurses, or the reverse.

2. A diseased child should never be suckled by a healthy nurse,[1] neither should a healthy child be placed with a diseased nurse. We cannot be too careful in examining wet nurses, before their introduction into families; they are most commonly the mothers of illegitimate children, and therefore the greater need for caution. Not only the external parts, but the vagina and os uteri should be examined before a positive opinion as to the health of the woman be given.[2]

[1] See Clinical Lectures, (No. 7, p. 332,) by Dr. J. H. Bennett, of Edinburgh, for the details of a case, where two nurses recovered compensation from a surgeon from a circumstance of this kind.

[2] See Mr. Whitehead's (of Manchester) Cases, p. 368. Mr. Whitehead, by the way, is a firm believer in the contagion of secondary syphilis.

M. Waller, of Prague, published in 1851, an account of his researches on the contagion of secondary syphilis. This paper is republished in M. Cazenave's 'Annales de la syphilis,' 1850-51, t. iii. p. 174, &c. The results at which M. Waller arrives are the following:

1. Inoculation with the pus of a primary venereal ulcer produces, *under certain circumstances*, a primary ulcer of a light character; inoculation with the secretion of secondary syphilitic ulcers never produces ulcers having the characters of chancres.
2. Inoculation with the secretion of secondary syphilitic ulcers, on healthy subjects, produces in them secondary syphilis. Both primary and secondary syphilis, then, may be propagated by inoculation; the pus of primary syphilis produces primary syphilis, the pus or secretion of secondary syphilis produces secondary syphilis. (See p. 187, of the translation by M. Axenfield, in the third volume of Cazenave's 'Annales.')

It is singular how closely the results of these experiments coincide with the facts already detailed by me in the cases which I have related.

CHAPTER IV.

OF THE FIRST CLASS OF PRIMARY SYPHILITIC DISEASES[1]—GONORRHŒA, ITS VARIETIES, COMPLICATIONS, AND CONSEQUENCES.

OF BALANITIS.

INFLAMMATION OF THE GLANS PENIS—EXTERNAL OR FALSE GONORRHŒA—CHANCROUS EXCORIATION, ETC.

THIS disease is characterized by more or less redness, and a muco-purulent discharge from the surface of the glans penis, with or without excoriation. Balanitis rarely occurs alone, but is more frequently complicated with a similar condition of the internal surface of the prepuce (posthitis.) It is then termed balano-posthitis. As it is rare to see the affections separate, I shall consider both under the title of balanitis.

This affection may have a purely venereal origin,[2] or may succeed to intercourse with women labouring under leucorrhœa, or other simply inflammatory affections of the vagina, when this part

[1] Synonyms. Affections non virulentes.—*Ricord.* Maladies primitives à forme érythémateuse.—*Desruelles.* Catarrhal primary syphilis.—*Wallace.*

[2] "It is denied by many that the present variety of disease ever arises from the venereal poison, or that it even leads to secondary symptoms; and it is affirmed to be the consequence of numerous causes of common irritation. Now it must be admitted, that causes of common irritation often produce excoriations of the glans, corona, and prepuce, for this is a daily occurrence. It is also notorious that such excoriations may be produced without sexual intercourse, from acrimony of the natural secretions of the part, &c. But I have often had equally conclusive proof that the present variety of disease may arise from the application of secretions containing the venereal poison." (Wallace, p. 222.) Vidal (de Cassis) p. 119, is of the same opinion, and states that in several instances the pus of a balanitis, where there has not been the least breaking of the skin, has produced the characteristic pustule of chancre when inoculated. These, I believe, are rare cases, but they do happen. I have seen and treated one case, where I believed the disease to be nothing more than balanitis; but the wife had secondary symptoms, scaly blotches, and nodes. Dr. Wallace has recorded another. As these forms of disease, which are purulent in the commencement, frequently run on into ulceration, a very cautious opinion should be given.

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is covered with secretions of a more or less irritating character. The menstrual discharge will also frequently occasion balanitis, and I have frequently seen great anxiety arise to married men who have suffered from balanitis, the result of intercourse with their wives in one or other of the above-mentioned states. Balanitis sometimes owes its origin to a natural conformation of parts, and hence subjects with a natural phymosis, or small preputial opening, may be considered as predisposed to it.

The treatment of uncomplicated balanitis is extremely simple. When the glans can be denuded, and the inflammation is not very acute, the solid nitrate of silver may be passed slightly over the surface, covering it with a piece of fine soft linen, and then bringing the prepuce forwards over the glans. The penis should be covered with linen compresses soaked in cold water, or the liquor plumbi diacetatis dilutus, and the linen between the prepuce and glans renewed twice in the day; at each renewal of the linen, the parts should be washed with an astringent lotion.[1] It will be occasionally found that lotions of all kinds tend to keep up the irritation. When this is the case, the surface of the glans should be thickly dusted with an astringent powder:[2] this tends to allay the irritation, by absorbing the acrid secretions, and preventing any friction between the glans and prepuce. If the inflammatory symptoms accompanying balanitis run high, and are complicated with phymosis, aperients should be administered, and the patient kept quiet, and live low. Injections of the nitrate of silver, or an aqueous solution of opium, may be thrown up between the glans and prepuce. In cases where balanitis, thus complicated, terminates in gangrene, or this is threatening, Ricord recommends the free exhibition of opium, either by the mouth, or united with camphor in form of enema. Desruelles speaks highly of continued injections or irrigations in balanitis, or balano-posthitis, resorted to when these diseases are complicated with phymosis. To accomplish this, a small cannula may be fitted to one of Weiss' self-acting enema syringes; the cannula, which should be made of caoutchouc or elastic gum, is to be passed between the glans and prepuce, and thus, without removing it, a continued stream of some

[1] ℞. Plumbi diacetatis, ʒj;
Aquæ destillatæ, ʒviij. M. ft. lotio.

[2] ℞. Plumbi subcarbonat.,
Pulvis cinchonæ, āā ʒj;
Acid. tannic. gr. v. M. ft. pulvis.

narcotic or astringent injection[1] may be thrown gently up for some minutes together.[2]

The causes of external gonorrhœa are to be sought for in the natural conformation of the penis on the part of the male, and various morbid conditions of the vagina on the part of the female. A natural phymosis predisposes the patient to contract this form of disease; for instance, a person having natural phymosis cohabits with a female having various morbid discharges from the vagina; the discharge gets under the prepuce, and is there retained, as the patient cannot withdraw it to wash the part; the discharge excites inflammation of a more or less active character, which would all have been avoided if the glans could have been retracted and the part washed with a little soap and water. The secretion of the glandulæ odoriferæ, as they are termed, also of itself produces a form of balanitis, without even exposure to impure connexion. This secretion, which, in some persons, is extremely abundant and offensive, is retained by the elongated prepuce on the base and surface of the glans, there irritating and inflaming the parts, and ultimately producing adhesions between the glans and prepuce. Sometimes, when there is a very narrow preputial opening, and the discharge cannot make its way out, large collections of matter are formed, and the patient, unless an operation is performed, is only relieved by gangrene, or sloughing of the whole prepuce. I have been called to several cases where such a termination has taken place.

Case VI.

I was sent a short time since to see a young gentleman, about 17 years of age, whose disease occasioned the utmost alarm to his friends. On examining the patient, I found the penis enormously swollen and dark coloured, and a distinct gangrenous spot, about the size of a shilling, situated near its extremity, under which fluctuation was evident. The prepuce was long, so swollen, de-

[1] ℞. Decoct. papaveris, h. ij;
Aluminis ust., gr. xx. M. ft. injectio.—*Desruelles.*

Simple tepid water, with alum in the proportion of eight or ten grains to the pint, forms an exceedingly useful injection, particularly where large quantities are used.

[2] ℞. Cerati simplicis, vel mellis,
Olei olivæ, āā ℥j;
Hydrargyri chlorid., ℥ss;
Ext. opii, ℥j. M.

The above preparation may be introduced between the glans and prepuce by means of a camel-hair pencil; a remedy of great value.

formed, and œdematous, that it was impossible to make out the situation of the preputial opening. I was convinced that it was a case of balanitis with occlusion of the preputial opening. I made a deep incision through the black spot into a collection of matter between the glans and prepuce, after which, with ordinary treatment, the patient speedily recovered.

The chief causes of balanitis are to be sought for in the condition of the female vagina. "In examining the vulva, vagina, or neck of the uterus, in females labouring under discharges which have produced balanitis or gonorrhœa in the male, we have observed the mucous membrane covered with papulæ or follicles, more or less developed, constituting a papular vaginitis, or uterus vaginitis, sometimes assuming the form of small spots, in size not larger than a pin's head, isolated, or more or less confluent. On the same portion of the mucous membrane we have distinctly seen patches more or less numerous, and varying in extent, which have a striking analogy with the suppurating surfaces of the skin on which a blister has been applied. Again, in some forms of blennorrhagia in the female, we find the mucous membrane of the vagina of a uniformly red colour. At other times the redness occurs in isolated patches with swelling, heat, and pain, unattended by any secretion. Other cases of this kind give rise to a morbid secretion, the colour and consistence of which are variable. The differences in the character of the secretions appear to have no reference to the causes which have produced them. The discharges from the urethra, vulva, vagina, and uterus, are very various; but the difference has not appeared connected with any one particular lesion more than another. The acute stage generally, whatever may be the particular lesion, causes at its commencement a secretion almost wholly serous, or only consisting of mucus more abundant than usual, which afterwards becomes opaque, purulent, or of a darkish yellow colour, sometimes green, sometimes mixed with blood. The chronic stage often gives rise to a milky secretion of a thickish consistence, similar to that of cheese, or simply to a mucous flux. The chronic discharges also may put on a rusty appearance, and become tinged with larger or smaller quantities of blood. These secretions, whether in the acute or chronic stage, may have no smell, or, on the contrary, may have a very unpleasant odour, particularly where the mucous papulæ exist. The smell is often so decided, that it is characteristic in a great number of cases. The only differences

which result from the particular seat of the blennorrhagia are, that the secretions which come from the uterus are always more mucous, thready, and collected into flocculi; whereas those which escape from the urethra, vulva, or vagina, present a less tenacious character than the others.[1]

These forms of vaginitis sometimes occur in patients of the highest respectability, and are capable of producing balanitis in the male. I have seen one or two instances where an inflamed and irritable condition of the vagina in the female, during the latter months of pregnancy, has produced balanitis in the husband, and where a great deal of family distress has been occasioned by the circumstance.

Case VII.

A lady, whom I well knew, the mother of seven children, in her eighth pregnancy suffered from a white discharge, with swollen labia and much irritation. Her husband became affected with inflammation of the glans and prepuce, swelling of the penis, an abundant offensive discharge, and ultimately phymosis, the inflamed surfaces ulcerated to some extent. The case was obstinate, and occasioned much family annoyance. What is, however, very remarkable, and proved the nature and origin of the disease, was that with the accouchement the disease of the lady disappeared, and intercourse no longer affected the husband. In the ninth pregnancy the same symptoms occurred again in the wife, and produced a similar obstinate disease in the husband.

The forms of disease on the part of the female I have just enumerated will produce external gonorrhœa, and also gonorrhœa properly so called. Both gonorrhœa and ordinary leucorrhœa recognise the same pathology, *i. e.*, a vaginitis assuming various forms, accompanied by discharges also of varied character; yet, in one instance, we see gonorrhœa in both its forms, external and internal, constantly produced in the male; whilst in another, cohabitation takes place almost with impunity, as far as contracting disease is concerned. Hence it has been attempted to establish a differential diagnosis between the two, in which all have equally failed. Hunter, Clarke, and Churchill, have failed in doing so, and since the speculum has been so much employed no additional light on the subject has as yet been given.

[1] Acton on Venereal Diseases, pp. 172–3.

We must decide, in these instances, by the effects produced, by the facts before us, and not on the grounds of any *à priori* reasoning. When we see that blennorrhagia, or the various forms of vaginitis with muco-purulent discharge in the married female, on the one hand, exist for a longer or shorter period, for months, or even years, without producing the slightest affection on the part of the husband, or on that of any child which may happen to be born during the continuance of the disease, and observe, on the other hand, forms of vaginitis precisely similar to those which I have mentioned, producing balanitis, gonorrhœa, and all their attendant consequences, we must be disposed to admit something specific in the latter case, some form of morbid poison which does not exist in the first.

"Between the muco-pus of a pure gonorrhœa and the pus or muco-pus of other discharges, there is a difference precisely similar to that which exists between the pus of chancre producing a characteristic pustule by inoculation, and the pus of other sores consequent upon sexual intercourse, which do not give this result, although no chemical or physical circumstances are capable of showing in what this difference consists."[1]

The symptoms of balanitis are heat, itching, and redness of the glans penis and the inner surface of the prepuce, the redness being disseminated in patches, as though the surface of the part had been slightly scalded with drops of hot water sprinkled over it. These symptoms are accompanied by a muco-purulent discharge from the preputial opening, and if the glans can be denuded, its whole surface and that of the prepuce are covered with an adhesive flaky matter looking like curd. This is the condition if the glans can be denuded; if it cannot, all we generally observe is a muco-purulent discharge from the preputial opening, though not from the urethra, with heat and swelling at the end of the penis. In fact, the balanitis itself is the most common cause of our not being able to denude the glans penis; the inflammation produces the phymosis, which was not present till the balanitis was contracted. Again, the phymosis may be congenital.

Discharges from the end of the preputial opening, however, with a natural or acquired phymosis, are not all dependent upon balanitis, as I have described it. They may result, and commonly do result, from a chancre or ulcer, situated either on the glans or pre-

[1] Baumés précis sur les Maladies vénériennes, vol. i. p. 208.

puce, and producing the inflammation with the discharge from the preputial orifice. If an ulcer of any standing be the cause of the mischief, we can generally detect it from a partial induration felt at the same part of the prepuce under the skin, and a peculiar soreness and tenderness existing in this part, when the penis is pressed or rolled between the fingers. These would be the distinctive symptoms to guide us in a differential diagnosis between phymosis with chancre, and phymosis the result of pure balanitis, since both diseases would be characterized by the same, or pretty nearly the same, general symptoms; viz., swelling and heat of the end of the penis, with phymosis and discharge from the preputial opening. A balanitis might again exist with a pure gonorrhœa; this is very common, but in this instance the discharge from the urethra can be seen. I mention these complications of balanitis, because their existence in balanitis would materially modify the treatment.

Balanitis is in many, if not in most instances, complicated with phymosis, and the question naturally arises whether this is to be relieved by an operation or not. If the phymosis be a congenital one, and the patient have contracted a balanitis, in most instances the operation should be performed, as the continuance of the phymosis predisposes the patient to a number of those inconveniences mentioned before, adhesions between the glans and prepuce, and thickening of the latter from chronic inflammation. If the phymosis be an acquired one, produced by the disease, the operation should not be performed. Poultices, cold lotions, purgatives, and, above all, the calomel and opium pommade, will in a few days, in almost every case, enable us to retract the prepuce. An operation in the latter case is unwarrantable, whilst in the former it is not only justifiable, but highly advantageous. We shall have more to say of the operation for phymosis when speaking of primary venereal sores complicated with it; but in cases of uncomplicated balanitis, the rules I have given are safe, and have been proved by myself time after time in practice. Balanitis may, if neglected or badly treated, continue for an indefinite period of time, may run on into conditions of superficial ulceration, may produce adhesions of the prepuce to the glans, either partial or total, thickening of the prepuce, and, according to Roux, cancer of the penis. Again, it commonly produces enlargement of the glans in the groin, and occasionally bubo. I have seen the latter in one or two instances.

Secondary symptoms may succeed to simple balanitis, and some modern authors have recorded examples of the fact. If balanitis

or chancrous excoriation is suffered to continue for an indefinite period of time, a thickening of the diseased surface always occurs, and a chronic suppuration is established from the abrasion covering the thickened part. In this state of things secondary symptoms will occur in the male, and may be produced in the female, when cohabitation is permitted under such circumstances. I have seen eruptions accompanied by a node on the forehead, loss of the hair, and other symptoms of constitutional syphilis produced in the wife, where this species of abrasion, with thickening, were the only symptoms in the husband. Some cases have been brought forward in which constitutional symptoms, characterized by copper-coloured patches and papulæ, succeeded to balanitis or discharge from the external surface of the glans and from the prepuce, without ulceration or breach of surface. In the cases mentioned, this external gonorrhœa was followed by the falling off of the hair, and eruptions precisely similar to those which follow primary venereal sores, and these complaints were curable only by mercury. In the first case, the patient had never before any venereal affection till he contracted a balanitis characterized by redness, heat, and itching of the external surface of the prepuce, to which succeeded a purulent discharge.

This form of disease is considered by many modern writers as a variety of gonorrhœa, differing from the urethral variety merely in its seat. In the cases already alluded to, this external gonorrhœa or balanitis was followed by falling off of the hair and eruptions precisely similar to those which succeed to venereal sores, and were curable only by mercury. In one case, the patient had never before had any venereal affection till he contracted a balanitis characterized by redness, heat and itching of the external surface of the glans penis and neighbouring portion of the prepuce, to which succeeded a purulent discharge, *without any kind of excoriation or wound.* This was succeeded "by copper-coloured patches on the forehead and chest; and a female, with whom this patient cohabited, became affected with heat and swelling of the genitals, pain in making water, and, two months after, an eruption on the inside of the thighs, the nose, and the forehead. The female was declared diseased; put on the use of mercury, with sarsaparilla, and recovered. The patient (the male) took to himself a second mistress, still suffering from the affection (balanitis,) which he did not consider syphilitic, the first mistress having married after recovery. The second mistress soon became affected

with the same symptoms as the first, and, two or three months after, a constitutional affection made its appearance, which ultimately assumed a pustular form. The prospect of an advantageous marriage presented itself, and our patient now separated from his second mistress and married. In a short time the wife was affected, as her temporary substitutes had been before, and subsequently with eruptions of a like character. The patient and his wife now put themselves under medical care; and the surgeon stated that the only disease in the genitals with which the husband was affected was redness of the glans penis, with purulent discharge; no ulceration, breach of surface, or trace of cicatrix. The patients were put upon mercurial treatment, and both perfectly recovered." These primary forms of disease in the glans and prepuce, marked or characterized by discharges, without ulceration, have of late been supposed to be precisely identical in their character with gonorrhœa, differing from it only in their seat. We are inclined, from observation, however, to believe, in many instances this analogy is not correct, though it may hold good in some, since what appears a mere catarrhal affection in the first instance, frequently degenerates into ulceration more or less extensive. Many modern surgeons of experience in the matter we are now considering, state that simple balanitis may produce a chancre, and thus induce secondary symptoms.

A very marked example of this occurred in a patient in the Queen's Hospital; he was admitted for simple balanitis. On examining him a few days after, I was surprised to see a crop of small ulcers on the prepuce. I have in private practice, not only in one, but in several instances, seen a superficial sore appear before a patient was well of the balanitis, and this sore followed by a bubo; in these instances a fresh infection was impossible. The distinctions are perhaps not very clearly defined between a pure catarrhal inflammation of the glans and prepuce, and those very mild forms of syphilis which some writers have termed superficial. Dr. Wallace has recorded a case bearing upon this point, which, in a practical point of view, is so instructive, that I shall introduce it here.

"A lady was brought to Dublin on account of an eruption, and a state of general ill health. She had been some months married, and was pregnant. The eruption did not appear of a doubtful character. It was a syphilitic eruption, of a rubeoloid form, and was accompanied by its almost constant attendants, a superficial

disease of the fauces and a condylomatous state of the pudenda and of the orifice of the anus. There were, also, small condylomata in the axillæ. I communicated my opinion to the husband of the lady, who had accompanied her to town, and he denied that he had ever had any venereal disease; but he at the same time admitted, that some months before his marriage he had got, in consequence of a suspicious intercourse, what he called a chafing; that he had consulted Mr. M., who directed for him a wash, by which the disease was removed; that he had been assured by this gentleman that the complaint was not venereal, and did not require mercury; and that he had taken the precaution of submitting himself to examination before marriage, with the view of making his mind sure that he had no venereal taint; but, on examining him, I found a very slight oozing at the corona, with a very slight thickening of the corresponding portion of the lining of the prepuce; and there existed on some parts of his body slight cutaneous desquamations of a suspicious character."[1] The lady miscarried of a dead child, and the husband and wife were placed under mercurial treatment and recovered.

Balanitis is exceedingly liable to return, without any evident cause, after it has been supposed to be cured. It breaks out again and again, at uncertain intervals, showing the irritation still to exist which produced it in the first instance. Sometimes the irritation reappears in its original form, sometimes it gives rise to herpes preputialis, or to eczema of the glans, or to minute and superficial ulcerations, which, after repeated returns, leave behind them some thickening, which may give rise to mild constitutional symptoms, and is capable of producing disease in the female, as the preceding remarks and cases fully show. In such cases the patients must be put on general treatment, a mild mercurial course, the hydriodate of potass with sarsaparilla, and the mercurial vapour-bath.

[1] Wallace, pp. 229-30.

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CHAPTER V.

OF GONORRHŒA.[1]

GONORRHŒA, a disease of daily occurrence, is perhaps as much or more than any other presented to the surgeon, the source of annoyance to him, and anxiety and weariness to his patient. This, we apprehend, arises in a great measure from the want of a correct knowledge of its modifications and varieties,[2] and consequently an uncertainty in the treatment more especially adapted to its different forms. Gonorrhœa consists in inflammation, more or less acute, of the mucous membrane of the urethra, or other parts of the genito-urinary passages, accompanied by the secretion of a muco-purulent fluid of a yellow or greenish appearance; pain, itching, or irritation in voiding the urine, with, in the male, repeated and involuntary erections of the penis.

[1] Urethritis, acute or chronic,—*Desruelles.* Blennorrhagia,—*Swediaur.* Venereal or syphilitic catarrh,—*Wallace.*

[2] Varieties of gonorrhœa.

First species—Gonorrhœa in the female:

Varieties, seated in { the vulva, the vagina, the uterus, the urethra, } may exist alone, or variously combined.

Second species—Gonorrhœa in the male:

Varieties, seated in { the urethra, on the prepuce, or the glans penis, } may exist alone, or variously combined.

Hecker; 'Des différentes espèces des Gonorrhées,' has described the following varieties:

1. Ordinary, specific, or virulent gonorrhœa.
2. Consecutive gonorrhœa (gleet.)
3. Gonorrhœa accompanying syphilis (probably depending on chancres of the urethra.)
4. Gonorrhœa accompanying scurvy.
5. Gonorrhœa accompanying scrofula.
6. Gonorrhœa dependent upon or kept up by rheumatism.
7. By gout.—

The discharges from the male urethra which are produced by sexual intercourse may be reduced to three, and these I term, simple gonorrhœa, ordinary or specific gonorrhœa, and gonorrhœa which is the result of a venereal sore in the urethra. These three kinds are different in the causes which they recognise, their pathology, mode of treatment, complications, and consequences.

Simple gonorrhœa results from cohabitation with females during the menstrual period, or when they are labouring under inflammatory or diseased states of the vagina or os uteri; which furnish discharges of a more or less acrid or irritating nature. These gonorrhœas are not capable of propagation in the same way that an ordinary specific gonorrhœa generally is; in fact, they are not contagious. Many writers have endeavoured to discover some distinguishing marks between gonorrhœa and other discharges from the female which we may call leucorrhœal, and which, under certain circumstances, give rise to simple gonorrhœa in the male. That differences do exist in the nature of these discharges on the part of the female we are perfectly convinced; differences which the speculum cannot distinguish, but which are evident in their effects upon the male. These various discharges produce in the male, occasionally, a disease which may be termed simple gonorrhœa, totally different from a specific gonorrhœa in duration, intensity, and consequences; and, still further, not to be cured by the same remedies.[1]

8. Accompanying various local exanthemata.

9. Accompanying hemorrhoids.

10. Produced by certain conditions of the urine. The crystals of oxalate of lime present in the urine—oxaluria.

11. By masturbation, &c.

12. By continence.

13. By causes acting directly on the parts affected, as the introduction of instruments into the bladder, for the relief of stricture, or for lithotomy. I have in two instances seen a disease precisely similar to gonorrhœa, with a swelled testicle, occur after the latter operation.

14. By sympathy.

15. Occurring in females after delivery.

Most if not all of these varieties must be recognised by those familiar with diseases of this character. Many of them are dependent on specific or ordinary gonorrhœa occurring in certain constitutions; thus, the ordinary specific gonorrhœas, in habits confirmedly rheumatic, gouty, scorbutic, or scrofulous, form varieties of the disease which require most important modifications in treatment.

[1] The secretions from a healthy female will sometimes produce in certain individuals discharges closely resembling gonorrhœa. Hence some authors have believed in the spontaneous origin of this disease. (Skey's Lectures on Venereal dis-

The late Mr. B. Bell was of opinion that discharges from the male urethra, accompanied by heat and scalding on making water, may succeed to connexions with women suffering from fluor albus.[1] He merely remarks, that such discharges generally subside much more quickly than an ordinary gonorrhœa. He mentions its continuance from this cause eight or ten days, and cautions young practitioners against giving precipitate opinions on such cases. I have frequently been consulted by persons labouring under discharges of this character, which have been communicated by females with whom they had been in the habit of cohabiting, and who had never perceived any disease till they visited their mistresses after dining out and drinking freely; then a discharge, with scalding on micturition, has been set up, which has continued a few days, been rendered worse by specific remedies, and yielded to low diet, aperients, and an injection.[2]

Case VIII.

A gentleman contracted a gonorrhœa in South America, which disappeared under treatment. On returning to this country he perceived, the day after intercourse, a profuse purulent discharge from the urethra, which at first had many of the characters of gonorrhœa, though unaccompanied by scalding or chordee: the disease disappeared in a few days. The same discharge appeared frequently after intercourse, especially if the patient had been drinking wine previously. No disease was communicated to a healthy female by this discharge, after repeated intercourse. It always disappeared with a few days' low diet and a mild aperient.

This is the type of a class of cases which are common, and which generally yield to the treatment mentioned, to which a weak astringent injection may be added, should they prove obstinate.

eases, p. 174, &c.) Mr. H. J. Johnston has recorded three very remarkable cases of this kind. (On Gonorrhœa, and its Consequences, p. 32.) I have examined females more than once, in whom I could detect no disease whatever, who were said to have communicated a gonorrhœa.

[1] See a remarkable case recorded by him, vol. i. p. 425, of his Treatise on the Venereal Disease.

[2] "Both sexes are liable to complaints that very closely resemble the gonorrhœa. This occurs to men who have an irritable stricture, or at least an irritable urethra, who find on some excitement a sudden appearance of copious discharge; and if it appear after intercourse, it may be as soon as twelve hours, is at once of a purulent character. The symptoms of this spontaneous complaint usually remain a short time without increasing, and then cease without any apparent cause, or decided course of treatment." (J. P. Vincent; Observations on some points of Surgical Practice, p. 328.)

We believe, with the best pathologists of the day, that gonorrhœa, though the result of impure cohabitation, and hence termed a venereal disease, is an affection of a totally different character to the primitive syphilitic ulcer. We do not believe the opinions of the late Dr. Wallace and others to be true, that syphilis and gonorrhœa are varieties of the same disease;[1] modern testimony, drawn from the results of inoculation, universally proving that the pus of chancre has never produced gonorrhœa, and the reverse.[2]

The causes of gonorrhœa are various; the most frequent, however, is cohabitation with a female affected with the same disease. It is certain that inflammation with muco-purulent discharge from the urethra, may be the result of intercourse with women who labour under various forms of disease, such as inflammation of the vagina, the lochial or menstrual discharges, fluor albus,[3] ulcerations of various kinds not syphilitic, secondary syphilitic ulcers of the os uteri, and other morbid conditions, amongst which Cullerier and Ratier specially mention the cancerous ulcer. It appears to me evident that, in the present state of science, it is impossible

[1] On the venereal Disease, &c., p. 284, and elsewhere.

[2] See Ricord, and the authors quoted by him in his work already referred to; also Cullerier, in Lucas Championniere's work, p. 384, &c. &c. The whole history of the pathology, consequences, terminations, complications, and the effects of remedies in the treatment of gonorrhœa, mark it as a disease distinct from chancre. This was the universal belief in this country, with few exceptions prior to the time of Ricord, who only confirmed what British surgeons already believed and acted on, yet, with all this, there do occur from time to time cases of secondary syphilis, in no way to be distinguished from those which succeed to chancre, which own as their source and origin discharges from the urethra only, which discharges apparently in no way differ from common gonorrhœa, and on examination of the urethra after the disappearance of such discharges, no vestiges of contraction or stricture, or any condition incompatible with a healthy organization, can be detected; surely if a concealed or urethral chancre (which is evident enough in most cases where it exists) had been present in such instances, its healing must have left some mark behind. I do not deny the existence of urethral chancre, I have seen it frequently, but I say that in all the class of cases I have alluded to, the existence of chancre has been presumed, not demonstrated.

[3] "It sometimes becomes a question of considerable interest, and of no little importance in married life, to determine whether leucorrhœal discharges in the female are capable of producing the assemblage of symptoms in the male, constituting the ordinary phenomena of gonorrhœa. If questioned on the subject, I should have no hesitation to return an answer in the affirmative, in all cases where the discharge in the female exhibits decidedly purulent properties, having myself witnessed several incontrovertible instances of the kind." (Whitehead; On Abortion and Sterility, and morbid conditions of the Uterus, with reference to the Leucorrhœal Affections, &c. &c.)

with certainty to ascertain what may be the true cause of that gonorrhœa which succeeds to cohabitation, unless the female be submitted to examination with the speculum: and hence little confidence is to be placed upon any statements of this character, unless the speculum have been employed as a means of confirming our diagnosis; the condition of the constitution also at the time of exposure to infection must be ranked as a predisposing cause. Gonorrhœa is also due to other causes apart from sexual intercourse, as masturbation, habitual costiveness, inflammation of the prostate gland, certain morbid conditions of the bladder or ureters, particularly the presence of calculi in these parts, piles, the excessive or immoderate use of wine or fermented liquors generally, and the warmer spices, more particularly cayenne pepper. In children this affection is sometimes dependent upon teething or intestinal worms. It also recognises for its cause a gouty or scorbutic diathesis, or succeeds to the suppression of habitual discharges, or the cure of old-standing cutaneous eruptions. In addition to all these causes, which are strictly internal, gonorrhœa is produced by external violence or injuries to the penis, and the operation of a second class of causes of various kinds which are external.

Gonorrhœa consists in an inflammation more or less diffused of the mucous membrane of the urethra, &c. Dr. Wallace considers this inflammation, from its diffused or erratic character, to be of the erysipelatous kind; hence Desruelles terms it "inflammation érythémateuse." The inflammation does not commonly affect the whole surface of the urethral mucous surface; when it does so, it is generally accompanied with violent symptomatic fever. The points in which the inflammation remains most commonly fixed, or in which it is manifested with greatest intensity, are the fossa navicularis, and the vicinity of the bulb: this arises from the anatomical disposition of the mucous membrane, which, in this situation, is much more intimately adherent to the erectile tissue beneath it. Gonorrhœal inflammation may be diffused over a wide surface, and "may involve at the same time the whole of the urethra, the bladder, the testicles, the glans and prepuce in the male; and in the female the nymphæ, clitoris, labiæ, vagina, &c.; and thus commencing at the preputial end of the penis, in the fossa navicularis, it not unfrequently creeps slowly on to the posterior parts of the urethra, to the bladder, or to the testicles, while it decreases or ceases entirely in the parts first affected."[1] It may

[1] Wallace, pp. 237–8.

be confined to the mucous membrane itself, or extend to the tissues beneath it; in the latter instance the irritation constantly determines a flow of blood into the cells of the erectile tissue of the corpora cavernosa and corpus spongiosum, which occasions a continual tension of the penis. Occasionally the inflammation becomes located in some part of the canal, producing thickening, effusion into the submucous cellular tissue, and in some cases ulceration; in these forms the disease assumes more of a local character, and is not so much disposed to spread by continuity of tissue.

The general symptoms of gonorrhœa are too well known to need description, yet those which indicate its localization in particular parts of the urethra may be detailed with advantage. When the disease is confined to the fossa navicularis, it is only in this portion of the passage that uneasiness or pain is felt when the patient voids his urine; the glans is more or less swollen, and its lips tumefied and red. On pressing and rolling the urethra between the thumb and finger, a distinct thickening is felt, as though a portion of a sound had been introduced into the urethra; the pressure is also painful to the patient. The greater and more marked the thickening of the urethra in this situation the stronger is the presumption that the disease is localized there, and does not extend to other portions of the canal. The discharge, under these circumstances, is trifling, though very teazing to the patient; it is constantly presented at the orifice of the urethra. When the inflammation predominates, or is fixed in the straight portion of the urethra, between the glans and the bulb, the patient has no pain in the perineum, but he experiences severe pain in making water, has frequent erections of short duration, and the discharge is more copious than when the disease is confined to the fossa navicularis.

If the disease be located in the bulbous portion of the urethra, the patient has pain in the perineum increased by pressure, a constant desire to void his urine, with frequent erections of the penis. The discharge is abundant, accompanied with great pain, and the stream of urine is diminished. When the membranous portion of the urethra is chiefly affected, the pain is severe in the perineum and the neighbourhood of the anus; the desire to void the urine is in many cases constant. The prostate and testicles are commonly enlarged and painful, the spermatic vessels congested, as well as the vasa deferentia. Consecutive diseases of the bladder, prostate, and testicles, are more frequently to be feared when the gonorrhœa occupies principally the two last-mentioned seats.

During the course of a gonorrhœa the patient is not unfrequently tormented with pains in the groins, weight and dragging in the testicles, irritation in the rectum, tenesmus, with retention or incontinence of urine. These depend chiefly upon the localization of the primitive disease, and are easily explained by the anatomical relations of the urethra. Fever of an inflammatory or intermittent character is sometimes present, and affections of the joints, which have been described by some authors under the title of gonorrhœal rheumatism.

Gonorrhœa is not always confined to the organs of generation, or their dependencies: hence, varieties in its seat, owing either to the sympathies of other parts during the presence of an urethral gonorrhœa, or from the direct application, from accident or carelessness, of the matter to a healthy mucous surface. These varieties in the seat of gonorrhœa have chiefly been observed in the eye, the nose, and the rectum.[1]

The more acute forms of gonorrhœa may terminate in resolution, or chronic discharges simply, a mere supersecretion, without ulceration or breach of surface. To ascertain this, however, when a discharge continues indefinitely, without being materially influenced by remedies, the canal of the urethra in the male, or the vagina in the female, should be carefully examined. The other more ordinary terminations of gonorrhœa are ulcerations of the urethra, stricture, and diseased conditions of the bladder, prostate, or testicles.

Gonorrhœa can hardly be confounded with any disease, except a primary venereal sore situated in the urethra. From this it is to be distinguished by the character of the discharge, which, in the latter instance, is serous, sanious, or bloody, and less in quantity than in the former, and by the presence of a circumscribed induration in some part of the urethra. The lips of the urethra may be everted, and when a sore exists in this situation it can occasionally be seen. In many instances, however, the ulcer is further down the passage, and then the latter mode of examination fails.

[1] I have seen three cases where protracted gonorrhœal discharges have been succeeded by purulent discharge from the gums. The matter found round the sockets of the teeth could be pressed up by the patient. In one case, all the teeth were affected, and the gums gradually receded from them, and were red and spongy. I am not able to say on what this condition depended, whether from the accidental application of gonorrhœal matter or not. This explanation seems most probable.

In order to understand clearly the principles upon which the treatment of a specific gonorrhœa is to be conducted, it will be necessary to premise that this disease admits of a division into four stages, to each of which a distinct treatment is applicable; and it is owing perhaps to prescribing for the first stage what is only suited to the second, or to the second what should have been employed in the first, that the disease is so often and so long protracted.[1] The first stage of gonorrhœa is characterized by the absence of acute inflammation; there is slight pain or heat in micturition, puffiness and redness of the lips of the meatus urinarius, which are sometimes everted and sometimes stuck so fast together by an adhesive muco-pus that we have some difficulty in separating them; there is also a slight muco-purulent discharge, and a flattening in the stream of urine. This is the first stage of gonorrhœa; and when these symptoms occur wholly or in part from four to ten days after a suspicious intercourse, we may be pretty sure a gonorrhœa has been contracted, and, if not cut short, will run on quickly to the second or inflammatory stage. It is to the first stage only that the abortive treatment about to be spoken of is limited.

The treatment calculated to cut short a gonorrhœa in its first stage should not, as a general rule, be resorted to after twenty-four hours from the first invasion of the disease, and is then not in all cases successful. Yet when the protracted character of discharges of this kind is considered, their frequent, various, numerous,

[1] Gonorrhœa naturally divides into four forms or stages, which, although they do not all follow each other with perfect regularity, yet when a case is presented to us, it must assume one of the following varieties:—

1. The first stage is marked by slight puffiness and adhesion of the lips of the meatus, with slight discharge of an adhesive muco-pus, variable in its duration from two to forty-eight hours. To this stage the abortive treatment is limited.

2. The inflammatory stage, characterized by more or less heat and pain in micturition, swelling and redness of the penis, with purulent discharge. This state ordinarily continues from seven to twenty-one days; whilst it lasts, a strictly antiphlogistic treatment is to be adopted, and neither injections nor specific remedies used, although there are here one or two exceptions.

3. The stage of discharge without inflammation, or marked complications, a pathological condition of the urethra. In this stage injections and specifics are generally safe and beneficial.

4. In this last stage, known by the name of blennorrhœa or gleet, the general inflammatory symptoms have altogether subsided, and the discharge has diminished to a drop or two in the day. The treatment must be regulated by the pathological conditions of the urethra, and the state of the general health or constitution of the patient.

and even dangerous complications, and sometimes their disastrous consequences, we cannot but do right to recommend this treatment when the patient applies in proper time, and there is nothing to contra-indicate its employ. An additional reason that this treatment, under such circumstances, should be employed, is the constitution of certain patients: the scrofulous, the rheumatic, the gouty, and those troubled with chronic diseases of the skin always suffer much from gonorrhœa; and if the disease once becomes established in the system it is very difficult to cure.

When a patient seeks advice before the inflammatory symptoms of a gonorrhœa are set in, an attempt may be made to extinguish the disease by what has been called abortive treatment; but if there be decided marks of inflammation, or any pain in micturition, or if the disease have existed more than twenty-four hours, this treatment will be attended, to say the least, with risk, if not with injury, and under the most favourable circumstances it will not always succeed. This plan consists in the use of injections, and the administration of smart purges, or large doses of fresh-ground cubebs or copaiba. When a patient consults me in a state favourable for the employ of the "abortive" treatment, I recommend rest and the lowest possible diet for the succeeding twenty-four hours, with the use of a weak injection of the sulphate of zinc,[1] or diacetate of lead,[2] or nitrate of silver,[3] which is to be used every hour. With this, in the form of medicine, I prescribe a large teaspoonful of freshly-ground cubebs every three or four hours. This plan very commonly succeeds, if the patient is in a condition for its adoption; and it is perfectly safe, and does not aggravate the succeeding stages, should it not succeed. Nor does it lay the foundation of organic mischief in the urethra. Some surgeons recommend strong mercurial and saline aperients, others large doses of copaiba.[4] The cubebs are safer than large doses of copaiba, and either of these remedies more certain, because their action is more direct, than the treatment by aperients. It is the practice of many to employ one, or even more, injections of strong solution

[1] ℞. Zinci sulph., gr. viij;
Aquæ dest., ℥viij. M. ft. Injectio.

[2] ℞. Liq. plumbi, ʒiij;
Aquæ dest., ℥viij. M. ft. Injectio.

[3] ℞. Argent. nit., gr. ij;
Aquæ dest., ℥viij. M. ft. Injectio.

[4] It is to this stage that the large doses of Copaiba, alluded to in the article on that drug, are to be limited.

of nitrate of silver in this stage of gonorrhœa, varying in strength from five grains to a scruple, or even more, of the salt to an ounce of water. I have seen the most disastrous consequences from this practice. It certainly occasions severe pain, which is the least evil; very commonly lays the foundation of organic stricture, or pains and discharges from the urethra, which harass the patient for years, or for ever. It frequently fails, prolongs and renders more severe the subsequent stages of the complaint; and its employ has been followed by death.

Case IX.

A student of medicine, previously in good health, contracted a gonorrhœa, for which he used in the early stages a strong solution of the nitrate of silver. An intense urethritis succeeded, with pains in the groins and abdomen; and on the third day of the attack I was sent for to see him. There was great tenderness over the lower part of the abdomen, and a large abscess forming in the right groin. He died within the week from peritonitis, and the abscess in the groin contained more than a pint of matter.[1]

The first stage of gonorrhœa speedily passes into the second, in which the inflammatory symptoms are more marked, and the discharge altered in character. The penis is red and swollen, the urethra feeling like a cord when rolled between the fingers; micturition is frequent, and attended with severe pain; and the patient is tormented with frequent and involuntary erections of the penis. Under some circumstances, if the inflammation run high, severe symptomatic fever may be present. In the third and fourth stages all these symptoms have subsided, and there only remains slight discharge, with varied pathological conditions of the urethra.

It is of immense importance, from reasons already adduced, that gonorrhœa should be prevented, or cut short in its commencement, since its duration, in many instances, is almost indefinite, and its consequences so serious. Patients, in a state of alarm after a suspected connexion, frequently seek the advice of their surgeon with

[1] Mr. Henry James Johnson details another fatal case, and a third where the consequences were very disastrous. "On the whole," says he, "this plan is open to grave objections, and I am neither disposed to practise nor to recommend it." (Op. cit., p. 60.)

Vidal (de Cassis) says that he tried nitrate of silver injections for a whole year, and succeeded but in one case. He thinks, and with justice, that we are rarely consulted sufficiently early to attempt abortive treatment with safety, or a probability of success. (Op. cit., p. 27.)

the following symptoms: slight irritation in the urethra, dragging of the penis and testicles, uneasiness in voiding the urine, with redness and tumefaction of the lips of the meatus, and a slight increase in the natural secretion of the mucous membrane of the urethra itself. These symptoms do not indicate that a gonorrhœa has been contracted, since an excessive excitement of the organs of generation, without infection, might produce them; but in the positive absence of any means of a differential diagnosis between this and the commencement of actual gonorrhœa, it behooves the patient to be careful. Some are of opinion that many gonorrhœas might be avoided, and the symptoms cut short on the onset, if the patients did not commit errors or excesses in diet at this period, and continue to expose themselves to all kinds of excitement. This opinion is deserving of the more attention, since we commonly see a discharge from the urethra set up and continue for some days after a debauch, and then of itself subside. When the symptoms we have indicated make their appearance, the patient should strictly adopt and adhere to the lowest possible diet, repose as much as possible in the recumbent position, and take smart aperients with diluent drinks. The warm bath must be avoided; this, of itself, under such circumstances, has frequently produced the disease; the cold bath, in warm weather, may be used.

A true gonorrhœa may be either acute in its commencement, or ushered in with symptoms so mild, and apparently so trivial, as to be termed chronic. The disease also may assume a variety of shades of intensity, varying between these two extremes. Against the first form a pure antiphlogistic treatment should be adopted. Aperients, low diet, with local bleeding, by means of leeches, from the perineum, with the warm bath, and complete repose of the organs affected, constitute the remedies especially applicable to the stages of acute gonorrhœa. Little medicine is here requisite beside small doses of the nitrate of potash, administered in a copious draught of barley-tea.[1] The gonorrhœal discharge may be ushered in with symptoms less acute than those just described; and under these circumstances general bleeding may be unnecessary, although, if the patient be plethoric and of full habit, local

[1] ℞. Sodæ carbonat., gr. xx;
Sodæ potass-tart., ʒj. M.
Bis terve die sumend. ex aquâ tepida; or added to half a bottle of soda water.—*Carmichael.*

Mr. Milton (on Gonorrhœa, p. 38,) prefers the preparation of potass to those of

depletion in the commencement will most materially facilitate our chance of a speedy cure.[1] Again, in that form of gonorrhœa which is chronic from the commencement, it will be well at first to examine carefully the urethra, and if we find a part which is indurated, hot, and painful on pressure, to apply a few leeches over it.[2] It is merely necessary to state that local bleeding, employed for these purposes, is not to be resorted to for the removal of discharge merely; nor without the symptoms of inflammation on some point of the urethra are evident. If employed when the membrane is lax, and no inflammation is present, where the disease is merely a gonorrhœa and not a urethritis, we shall prolong the affection instead of cutting it short.

An antiphlogistic treatment, although calculated to facilitate the action of other remedies in the cure of gonorrhœa, is not calculated of itself, at least but rarely, to accomplish this object.[3]

soda, and they are certainly very valuable in this stage of the complaint. Mr. Milton's forms are the following:—

℞. Potass. chlorat., ʒij;
Potass. acetatis, ʒss;
Liquor. potassæ, ʒiij;
Pulv. rhœi, ℈j—ʒss;
Aquæ dest., ʒviij.
M. ʒj ter. die.

The distilled water is to be boiled, and poured on the chlorate of potass, and the other ingredients subsequently added.

Or, ℞. Potass. acetatis, ʒj;
Spirit. ætheris nit., ʒiij;
Mist. camphoræ, ʒvj.
M. ʒj ter. die.

[1] "Négliger de pratiquer la saignée dans ce cas, c'est laisser échapper l'une des indications les plus pressantes." (Desruelles, p. 421.)

[2] To illustrate by a case the use of topical bleeding from a point of the urethra, in that form of gonorrhœa which is termed chronic:—A gentleman consulted me, who had been the subject of a slight discharge from the urethra for five months; he had frequent desire to void his urine, with a constant and troublesome tenesmus; he had tried remedies of all kinds, and injections, during this period, with partial benefit and occasional injury. On examining his urethra, which had not been before done, I discovered tenderness, with thickening of the urethra, in the perineum. Four leeches were applied with great benefit, and by their repetition at intervals, three or four times, he lost his pain, his tenesmus, and the discharge.

[3] Gonorrhœa is sometimes more than a urethritis. Though it would be, as a principle, unsafe to adopt any other than an antiphlogistic treatment in the earlier stages of this complaint, where the inflammatory symptoms run high, yet such a treatment does not always succeed in subduing them. I have known cases where the patient has been confined to bed, lived on nothing but tea and gruel, taken aperients, &c., for a fortnight together, and yet the inflammatory symptoms have hardly

Hence another plan of treatment has been framed, which is termed "revulsive." This consists in the employment of remedies which are supposed, by producing a specific action of their own on the lining membrane of the urethra, to supersede that of gonorrhœa: these remedies are principally copaiba, cubebs, turpentine, the preparations of iron, iodine, and cantharides, with injections. Every practitioner must daily witness the uncertainty of the revulsive treatment of gonorrhœa employed alone, and the change from remedy to remedy, with but partial benefit to the patient. In this uncertainty many authors have endeavoured to lay down certain rules at what period the revulsive treatment may be resorted to with the most certain hope of realizing its full and curative effects.[1] "When the acute stage has ceased, although the patient may yet continue to be troubled with erections, and although the penis may be heavy and uneasy, and the glans and lips of the meatus still red and slightly swollen, I have recourse to those remedies which are termed 'par excellence' anti-gonorrhœal, which, however, I abandon, to have recourse again to antiphlogistics, if their employment occasion the least increase of inflammation."[2] The use of specific remedies should be limited to the purulent stage of gonorrhœa, when the more acute symptoms of inflammation have been subdued. "When an impression has been made on the inflammatory symptoms, and they cease to advance or remain stationary, the urethra should be injected every morning, and the patient should be placed under the combined influence of the balsam of copaiba and cubebs."

We are not to conclude from what has been said, that in all instances an antiphlogistic treatment is to be employed in gonorrhœa before we have recourse to those remedies that are more particularly termed specific. Thus, in scrofulous and weak subjects, or those previously troubled with nocturnal emissions, the inflammation may be of so passive a character that it will be proper to have recourse at once to the revulsive treatment, with injections. In all such cases, however, as I have before said, a careful examination of the state of the urethra and the constitution of the patient should be instituted.

yielded at all; whilst under such circumstances, with the cautious use of specific remedies and mild injections, the symptoms have very quickly abated. If the acute symptoms of a gonorrhœa do not yield in ten or twelve days to antiphlogistic treatment, the so-called specific remedies should be cautiously administered.

[1] They should rarely be employed before the tenth day of the disease.

[2] Ricord, pp. 725–6.

The copaiba balsam is one of the most common remedies used in the revulsive treatment of gonorrhœa, and that upon which most dependence is to be placed. It may be employed early in the disease, unless the inflammation of the urethra be very acute; it is then only to be used when the symptoms are, in some measure mitigated by general or local bleeding, &c. If the disease be subacute, it may be administered during the period that local bleeding from the perineum, &c. is practised. In the chronic forms of the complaint it may at once be employed. Ricord remarks, that it is only against the urethral form of gonorrhœa that copaiba is efficacious; he believes it possesses little or no influence over the vaginal or uterine varieties, &c. Both this author and Desruelles think it is much more effectual given alone than in a state of combination with other remedies, and recommend it to be given, as the most pleasant way and least likely to disturb the stomach, on the surface of a glass of white wine or lemonade. I believe its effects are more marked in a state of combination, at least that the combination is more beneficial than the balsam taken singly.[1] It may be given by way of enema when the stomach will not bear it; but when so employed, the dose must be much larger than when given by the mouth. The copaiba has likewise been administered with success in large doses at the very onset of gonorrhœa, however acute, and without any preparatory treatment. Monteggia and Fuller administered from half an ounce to an ounce of the balsam for a dose night and morning, at all periods of the disease.[2] M. Delpech succeeded in curing four hundred cases by administering two drachms and upwards for a dose three times a day: if the inflammation was acute, general bleeding preceded its employ.[3] Rossignol was successful in three hundred cases of gonorrhœas of all kinds. He employed large doses of the medicine uncombined, and did not submit his patients to any preparatory treatment, or any dietetic regimen.[4] The average duration of treatment in these cases was eight days. The method we have just described must be employed with caution; and in most cases where the patient is

[1] ℞. Bals. copaibæ, ℥ss;
Pulv. cubebæ, ʒvj;
Liq. potassæ, ʒiij;
Pulv. acaciæ, ℥ss;
Aquæ cinnamom., ℥vij. M.

[2] Bulletin de la Société Médicale d'Emulation, 1822.

[3] Revue Médicale, t. vii., p. 408.

[4] Dictionnaire de Merat et Delens.

plethoric it would be well to accompany or precede it with a general bleeding. We think it might be then employed with pretty general success in cutting quickly short a gonorrhœa, when a patient applies immediately after having contracted it. M. Lallemand, in repeating the experiments of M. Ribes,[1] concludes that, although the large doses of copaiba succeed sometimes in cutting short an acute gonorrhœa, they sometimes augment the inflammatory symptoms and the discharge. I have seen one or two patients in which an incurable incontinence of urine has been brought on by large doses of copaiba.

The balsam of copaiba may be administered alone in wine or lemonade, as I have said, and this is the best way when it is used in the commencement of the disease. It may also be given in various forms of combination.

The essential oil of copaiba, the resin of copaiba, the balsam enclosed in capsules, the alkaline solution, and a soluble extract, have been employed with the view of getting rid of the unpleasant smell and taste of the balsam: these remedies, however, are none of them entitled to the same confidence as the latter remedy.[2]

The piper cubebæ is employed in the revulsive treatment of gonorrhœa, after the same manner as the copaiba. It may be administered in moderately large doses on the onset of an acute af-

[1] Mémoire sur l'emploi de baume de copahu à haute dose dans la gonorrhée et l'engorgement consecutif du testicule. (Loc. cit., et Revue Médicale, t. ix.) M. Ribes gives from two drachms to an ounce of the balsam for a dose, to cut short a gonorrhœa in the commencement.

[2] *Particular forms for the administration of Copaiba.*

MIXTURES.

℞. Balsam. copaibæ, ʒj;
Mucilaginis gummi acaciæ, ʒij;
Vini Xerici, ʒiv. M. (Val de Grace.)
A fourth part twice a day or more frequently.

℞. Balsam. copaibæ, ʒj ad ʒij;
Aquæ, ʒiv;
Vitelli ovi, No. 1;
Liq. opii sedativ., ♏ x ad xx. M. (Cullerier.)
The quarter part, or more, night and morning.

℞. Balsam. copaibæ,
Syrup. tolutanos,
Mucilaginis gummi acaciæ, āā ʒj;
Aquæ rosæ, ʒiij.
Sp. ætheris nitric., ʒiij.
The quarter to the half, night and morning.

fection, with a view of at once cutting it short; when employed, however, under these circumstances, the same rules must be observed as those we laid down for the administration of copaiba.

℞. Aquæ menthæ pip.,
Sp. vini rect.,
Balsam copaibæ,
Aquæ aurantii, āā ʒij;
Sp. ætheris nit., ʒj. M. (Chopart.)
Two large spoonfuls, three times a day.

℞. Resinæ copaibæ,
Sp. vini rect.,
Syrup. bals. tolutan.,
Aquæ menthæ pip.,
Aquæ aurantii, āā ʒij;
Sp. ætheris nit., ʒij. M. (Chopart.)
Three or four large spoonfuls, night and morning.

PILLS.

℞. Sapo. Hispaniolæ, ʒij;
Balsam. copaibæ, ʒj;
Pulv. glycyrrhizæ, q. s. ft. pil. 120.
Dose.—From 15 to 40 a day, at intervals.

℞. Ext. catechu, ʒss;
Bals. copaibæ, ʒiij;
Terebinthinæ chiæ, ʒj;*
Sanguinis draconis, ʒss. M.
To be made into pills or boluses of ten grains, from ten to thirty of which are to be taken daily, at intervals.

℞. Ext. catechu,
Bals. copaibæ, āā ʒiij;
Hyd. chlorid., ℈j;
Pulv. glycyrrhizæ, q. s. ft. pil. 150.
Dose.—Twelve a day, at intervals.

When employed as an enema, the dose of the balsam should be from half an ounce to an ounce.†

INJECTIONS.

℞. Bals. copaibæ,
Vitelli ovi, āā ʒss;
Infus. rosæ, ʒxv. M.

℞. Bals. copaibæ, ʒj;
Sacchar. alb., ʒj;
Sp. vini, ʒvj;
Aquæ destillat., ʒxiv;
Ext. opii, gr. vj.

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* I have substituted the chia turpentine for the colophane, or powdered yellow resin, of the original prescription.

† See Velpeau; Recherches et Observations sur l'Emploi du Baume de Copahu, et du Poivre Cubèbe, administrée par l'anus contre la blennorrhagie. Archives générales de Médecine, t. xiii., p. 45.

The cubebs may also be given in chronic gonorrhœa, and in gleet, separately, combined with copaiba, or united with some preparation of iron. It may also be employed in form of enema.[1]

Many other remedies may be resorted to in the protracted forms of chronic gonorrhœa: these are chiefly the preparations of iron; chalybeate waters; iodine, particularly in its combination with iron, so successfully employed by Ricord, Richard, and Henry;[2] lead,[3]

Mix the balsam with the sugar, then add the alcohol and the water gradually; pass the injection through a funnel with a view of extracting those portions of the balsam which may not be dissolved. This injection is employed at Val de Grace, in chronic gonorrhœa, complicated with cystitis.

[1] The piper cubebæ soon loses all its medicinal properties when ground. In order to derive any benefit from it, it should be fresh ground, as it is wanted.

Particular Forms for the exhibition of Cubebs.

MIXTURE OF CUBEBS AND COPAIBA.

℞. Bals. copaibæ, ℥ss;
Pulv. pip. cubebæ, ℥j;
Vini Xerici, ℥iij;
Aquæ rosæ, aurantii, vel menthæ, ℥v;
Pulv. acaciæ, q. s.; ft. mist.

Employed with great success at Val de Grace, in acute or chronic urethritis.

ELECTUARY OF CUBEBS.

℞. Pulv. pip. cubebæ,
Sanguinis draconis,
Pulv. ratanhiæ,
Ext. catechu, āā ʒij;
Bals. copaibæ, q. s.; ft. elect.

Dose.—From two to four drachms every twenty-four hours, in chronic gonorrhœa, or gleet.

℞. Pulv. pip. cubebæ, ℥ss;
Balsam. copaibæ, ʒij;
Ferri sulphatis, ʒj;
Resinæ flavæ, v. terebinthin. chiæ, ʒiij. M.

To be made into boluses of ten grains each. *Dose.*—From fifteen to thirty a day, at intervals. In chronic gonorrhœa, or gleet, in lax constitutions.

℞. Pulv. pip. cubebæ, ʒj ad ʒij;
Ferri carbonat., ʒss ad ʒj. M. ft. pulv.

This mode of exhibiting cubebs combined with the carbonate of iron is much and successfully employed after the acute symptoms of a gonorrhœa have subsided. One powder should be taken three times a day.

[2] ℞. Ferri iodidi, gr. ij ad v, or more.
Pulv. opii, gr. ¼;
Mucilaginis, q. s.; ft. pil.
Ter. die sumend.

[3] ℞. Plumbi acetatis, ℈j;
Bals. copaibæ, ʒj;
Pulv. glycyrrhizæ, q. s.; ft. pil. xxiv.

Dose.—One pill to eight. Employed with advantage by Desruelles in chronic gonorrhœa, or gleet.

cantharides, and turpentine.[1] In all instances, however, of chronic discharges from the urethra, this canal should be carefully examined, to determine, if possible, the pathological conditions which keep up or are associated with the discharge; without this we must be at a loss for correct indications, we must prescribe at hazard, and our patient's disease may be prolonged indefinitely. It is often of great service to employ small local bleedings from the perineum at the time we are using astringent or tonic injections, or the remedies alluded to in the present chapter.

I have hitherto said nothing about the use of mercury in gonorrhœa, because I do not believe in the specific effect of mercury over purely gonorrhœal diseases.[2] Dr. Wallace employed it constantly in gonorrhœa till the system was brought slightly under its influence, with the view "of preventing bubo and secondary symptoms." I believe this opinion to have originated, as I have before stated, in a false notion of the pathology and nature of this disease. Whilst, however, I deprecate the use of mercury as a specific remedy in gonorrhœa, I think it a remedy of great utility in the latter stages of this affection, exhibited with a view of removing those morbid changes in the urethra which long-continued chronic inflammation has occasioned. With this object it may be advantageously employed in the manner laid down by Dr. Wallace. "When," says this author, "gleet or chronic gonorrhœa is connected with an indurated state of the urethra, &c., it will be prudent to submit the patient to a short course of mercury, partly because the indurated and narrowed state of the urethra often depends on the specific effects of the venereal poison, and partly because, even when this is not the case, an alterative course of mercury frequently offers the best remedy. Indeed I have, on many occasions, experienced much pleasure on observing not only the gleety discharge, but also the contracted and indurated state of the urethra to disappear, as soon as the patient's constitution

[1] ℞. Terebinthinæ chiæ,
Sanguinis draconis, āā ʒij;
Olei terebinth., q. s.; ft. pil. xxx.
Dose.—From three to six or more in the day.
℞. Guaiaci resinæ, pulv.,
Terebinthinæ chiæ, āā ʒj. M. ft. pil. xxiv.
Capt. iii v. iv bis terve die. In gleet, or chronic gonorrhœa.

[2] Yet I have seen two cases, one where an accidental salivation cured an inveterate class, and another case, of fourteen months' duration, where an eminent surgeon prescribed mercury to salivation with success.

was brought under the specific influence of mercury."[1] Dr. Wallace recommends, as exceedingly efficacious, a combination of calomel with antimony and opium.[2]

Many surgeons object to the use of injections in gonorrhœa, fearing that they frequently occasion stricture, and other morbid conditions of the urethra. I am, however, of opinion, that a long-continued irritation or inflammation of the urethra is much more likely to give rise to these evils, and hence it is of consequence to cure a gonorrhœa by the means which will accomplish this object most quickly, at the same time that they do it safely. It is true that injections require great caution in their use, and their injudicious employment is frequently followed by serious consequences, but, in these instances, the blame rests with the surgeon, and not with the remedy. Injections should generally be used from three to six times in the day, and the fluid injected should be made to remain in the urethra a minute or two before it is discharged.[3]

In the acute forms of gonorrhœa, injections are inadmissible; they should be employed as soon as this stage is passed, and in cases chronic or indolent from the commencement, they may at once be used.

To cut short a gonorrhœa at once, when a patient applies before the acute stage has commenced, Ricord prefers injections of the nitrate of silver, which he employs of the strength of two

[1] Op. cit., p. 285.

[2] ℞. Hyd. chlorid., gr. j ad iij;
Pulv. antimon., gr. iij ad v;
Pulv. opii, gr. ss. M.
Conf. aromat. q. s.; ft. pil.
Nocte maneque sumend.

If the disease occur in a gouty or rheumatic constitution, colchicum may be substituted for the antimony in the above prescription.

[3] The manner of using injections is important, and the patient should be instructed by his surgeon how to inject the urethra, if he do not perform this operation himself. The whole surface supposed to be diseased should be brought into contact with the injection, and for this purpose syringes with a long point or nozzle should be used, as introduced by Mr. Milton, or again, a small catheter perforated at the sides, may be introduced into the urethra, and the injection poured through it: in other chronic forms of the disease when the prostatic or membranous portions of the urethra are implicated, a catheter should be passed into the bladder itself, and the injection thrown through it into the bladder; the instrument must be then withdrawn, and the injection poured out through the urethra, the whole urethral surface of which is thus in contact with the injection, as it is forced out by the contraction of the bladder. In chronic cases, where the seat of the complaint is uncertain, this is the most efficacious mode of using injections that I have ever practised.

grains to eight ounces of distilled water,[1] gradually increasing the strength as long as no irritation is produced. When the acute stage has passed, this surgeon generally employs the acetate of lead[2] for a few days, but has recourse again to the nitrate of silver in stronger solution, if the lead does not quickly succeed. Dr. Wallace employs the nitrate of silver as long as any morbid sensibility exists in the urethra; when this has ceased, and the discharge still continues, recourse may be had to solutions of bichloride of mercury, the acetate of zinc, or the sulphate of copper; the chloride of zinc has also been lately very successfully employed.[3]

A vast variety of injections are employed in the various forms of chronic gonorrhœa; those which I have already indicated are most generally used and successful. When the disease has become perfectly atonic, and all morbid sensibility has disappeared, or when the patient is merely teased with a drop or two of mucous discharge oozing from the urethra once or twice in the day, injections of wine are used extensively both by Ricord and Desruelles, and with much success, alone, or combined with tannin.[4] The in-

[1] ℞. Argent. nit., gr. ij—gr. v.
Aquæ destillatæ, ℥viij. M. ft. injectio.

[2] ℞. Plumbi acetatis, ℈ij;
Aquæ rosæ, ℥vj. M.

This strength is for the male urethra; if used as an injection in vaginal gonorrhœa, &c., the quantity of the acetate of lead may be much increased.

℞. Argent. nitratis, ℈j;
Aquæ destillatæ, Oj. M.

As an injection in chronic urethritis.—

℞. Adipis, ℥j;
Argent. nitratis, gr. iv. M.

Of use in the same affection, smeared upon a bougie, and thus passed into the urethra.

Injections should never be used sufficiently strong to cause severe pain in the urethra; mucilage and camphor are advantageously added to prevent this.

[3] ℞. Hydrarg. bichlorid., gr. j—ij;
Aquæ dest., ℥viij.

℞. Zinci acetatis, gr. xij—℥j;
Aquæ, ℥viij. M.

℞. Cupri sulphatis, gr. xij;
Aquæ, ℥viij. M.

℞. Zinci chloridi, gr. viij;
Aquæ, ℥viij. M.

The strength gradually increased.

[4] ℞. Aquæ rosæ, ℥iv;
Vini rubri, ℥ij. M.—

fusion of galls[1] with alum is also useful, and lately M. Ricord has employed the iodide of iron.[2] In weak solutions the iodide of iron has frequently arrested the gonorrhœal discharge in four or five days; in other instances it has brought on an acute attack of urethritis; but in these instances, when the inflammation has subsided, the patient has been cured of his gonorrhœa. In these instances, the average duration of the treatment has not been more than seven or eight days; in a third series of cases the patients have been unable to bear the irritation which injections of the iodide of iron occasioned, and consequently its employ was given up.

It will often be found of great service to vary the character of the injection, when one appears, from continued use, to have lost its effect: we shall also find that some patients bear one kind of injection better than others; hence I have found persons much benefited by port wine and tannin, who could not bear the weakest solution of the nitrate of silver.

Ricord, Fricke of Hamburg, and Desruelles, agree in opinion, that gonorrhœa is kept up occasionally from the contact of the two sides of the urethra; and hence it was proposed by Fricke to introduce, by means of an elastic gum catheter or bougie, a fine piece of lint into the urethra, and let it remain there, removing it only at each period of making water; the lint may be employed dry, or soaked in any astringent injection. The practice has been followed by occasional success.[3]

Sometimes all our remedies are unsuccessful in checking the discharge; it then becomes necessary to examine carefully the urethra, to discover upon what pathologic condition the continuance of this depends. In cases of morbid sensibility of one portion of

The quantity of wine gradually increased, till at length it may be employed pure. Desruelles adds a sixth or an eighth part of brandy.

℞. Vini rubri, ℥vj;
Tannin, gr. xviij. M.

For the male urethra; for the vagina, the quantity of tannin may be doubled, or still further increased. I have found this injection very valuable.

[1] ℞. Gallæ, ℥j ad ℥ij;
Aluminis sulph., ℈ij;
Aquæ ferventis, ℥viij. M. ft. injectio.

[2] ℞. Ferri iodidi, gr. ij;
Aquæ dest., ℥vj. M.

The quantity of the iodide may be gradually increased. Its employ requires caution and watchfulness.

[3] See Ricord, op. cit., p. 745, and in the Gazette des Hôpitaux; also Desruelles, op. cit., and Fricke, Lettres au Dr. Desruelles, &c.

the canal only, the solid nitrate of silver may be directly applied to it, by means of the "port caustic" of Lallemand, or any other convenient instrument. When most other means have failed, and a running still continues, with uneasiness, or morbid sensibility in the urethra generally, or in several parts, Ricord considers it advantageous to pass the solid nitrate of silver over the whole affected surface of the urethra. Chronic urethral discharges which have continued for a long period lose their local character, and become constitutional diseases. I have succeeded frequently in curing them by general remedies, when all specific treatments had failed.

Gleet, or Blennorrhœa, are names applied to a class of symptoms which commonly succeed to the more active forms of gonorrhœa.

In true gleet the discharge is said to be transparent, and of a mucous and not purulent character; but it will almost always be found that if the discharge exist in sufficient quantity to be collected on a glass slide, and submitted to microscopic examination, it contains pus globules.

The symptoms of gleet are variable. Sometimes the lips of the meatus are merely glued together by an adhesive matter, and no discharge can be perceived; at others a slight oozing of a transparent fluid occasionally takes place daily, or only once in three or four days: again a drop will appear the first thing in the morning and at no other period; and in a spot or two of discharge following the flow of the last drops of urine. There are cases where no excitement, either sexual or dietetic, appears to influence these discharges, and there are other cases in which excesses of this kind increase the discharge and render it purulent, if it was not so before.

At times these discharges can only be forced out by squeezing the urethra between the fingers. When they succeed to the flow of the last drops of urine, they are either seminal, prostatic, or vesical, and are forced away by the increased muscular exertion necessary to its expulsion. Gleet is sometimes associated with stricture, and to ascertain its nature the urethra should always be carefully examined before framing a plan of treatment for the patient. At times no change can be detected in the urethra, and a bougie of full size passes freely and without pain into the bladder; at other times there is a peculiar soreness or tenderness at one point, generally in the vicinity of the membranous or prostatic

portion of the urethra; the passage is occasionally irregular and uneven, and when stricture exists discharge always takes place on withdrawal of the bougie after it has passed through the stricture. In all gleety discharges of long continuance, the condition of the urethra behind the scrotum and that of the prostate should be ascertained, since some forms of gleet are frequently dependent on chronic mischief in the latter organ.

In some forms of gleet, although of long continuance, little constitutional or sexual debility is produced, but this is not commonly the case; a certain amount of sexual weakness almost always succeeds to a long-continued gleet, in which the viril power is more or less weakened or even altogether impaired or destroyed. This is especially the case if the gleet depend on causes situated in the prostatic portion of the urethra, or be complicated with discharges of semen, or the "*liquor prostaticus*,"[1] which is sometimes the case. In lax and irritable systems, where a gonorrhœa becomes implanted on a constitution where the sexual powers have been weakened or rendered irritable by excess, these complications are not uncommon, and in such cases the virility of the patient sustains a fearful shock.

Gleet is the termination of a gonorrhœa, and an inflammatory disease, and hence it may happen that the discharge results from chronic inflammatory mischief, localized in some part of the urethra: should this be well marked, an abstinence from stimulants, three or four leeches to the perineum, and a blister, may be of service; unless however the inflammatory action be well marked, bleeding must be used with great caution, as it frequently tends to prolong a gleet. Blisters to the perineum in such states, dressed with mercurial ointment till they are healed, succeed better.

If the discharge appear to come from a point of the urethra anterior to the bulb, injections will in most cases be of service, they should be weak and frequently repeated. In addition to those already mentioned, the bichloride of mercury is here perhaps one of the best.[2] If injections are to succeed, the whole mucous surface must be brought into contact with the remedy, and this is perhaps the reason why injections often fail. If the disease be confined to

[1] The exact nature of these discharges is at once rendered evident, by submitting them to microscopic examination. In a complication, such as I have just alluded to, we find the peculiar globules of the liquor prostaticus mixed commonly with a few spermatozoa and ordinary pus globules.

[2] ℞. Hydr. bichloridi, gr. j;
Aquæ destillatæ, ℥xij. M. ft. injectio.

one or more of the lacunæ anterior to the bulb, an injection as commonly practised is useless, for it does not reach the seat of the disease: should they be practised in the ordinary manner, for any complication behind the bulb, they are still more inefficacious. They are good remedies if properly applied. In order to inject the whole urethral surface anterior to the bulb, a small electro-gilt catheter, perforated at the sides in its whole length, and about six inches long, should be passed into the urethra; the point of a syringe, holding about four ounces, should then be applied to its extremity, and the injection gently pressed in through the catheter; the injection passes through the foramina, and comes in contact with all the mucous surface, and acting laterally injects the cavities of the lacunæ themselves; the injection runs out by the sides of the catheter, so that the action can be kept up as long as it may be required.

I adopt a different plan in affections of the deeper-seated portions of the urethra. I pass a catheter into the bladder itself, and throw the injection through it to the extent of four or six ounces; then withdraw the catheter, let the injection remain a few minutes, and desire the patient to force it out. The bladder should be emptied before the injection is used. In this manner weak solutions of creosote, bichloride of mercury, nitrate of silver, the tincture of the sesquichloride of iron, and other remedies, may be used, with perfect safety and a very great amount of success.

Bougies are valuable remedies in the treatment of many forms of gleet. They may be used simple or smeared with various kinds of ointments,[1] and in many cases succeed where injections fail. They are especially useful if this complaint be combined with stricture, or that uneven condition of the urethra already alluded to, which is so common in many forms of gleety and spermatorrhœal discharges. A bougie is useless if too small, injurious if too large: it should moderately distend the urethra, but not unduly stretch it. A bougie should be suffered to remain in the urethra till some amount of irritation is produced by its presence. It is a good plan to pass the bougie at night, desiring the patient to retain it for an hour or more. In such instances it is well to retain the bougie by

[1] ℞. Argent. nitratis ʒj;
Unguent. cetacei, ℥j; M.
℞. Ung. hydrargyri fort, ʒj;
Ext. belladonnæ, ʒij. M. (Vidal de Cassis.)

a piece of tape; should the patient fall asleep, it might slip down the urethra.

From the time of Benjamin Bell to Mr. Milton, blisters have been applied to the perineum and penis for the cure of gleet. I have used them often, at best with variable and uncertain success. Blisters to the penis are a nuisance to the patient, and must necessarily confine him, for a short period at least. They are useful only when the disease is located in some spots anterior to the bulb. One rarely cures, and we can hardly persuade a patient to repeat a remedy of this kind time after time. In the deeper-seated forms of disease, blisters to the perineum may be advantageously combined with the bougie and injections.

Internal remedies alone are rarely successful in the cure of gleet. It generally happens that, when the surgeon is consulted first, the patient has been ringing the changes on all kinds of specific remedies. In such cases it is well to abstain for a time from everything of this kind, to regulate the diet according to the constitution of the patient and the peculiarities of the disease, and exhibit a smart mercurial, followed by a saline aperient, repeating the remedy once or twice.

Specific remedies rarely succeed in curing a gleet. Should they be indicated, I generally prescribe them in combination with tonics.[1] Tonic remedies alone are frequently useful.[2] Occasionally, when there is a thickened and uneven condition of the urethra, I have found much benefit from alterative mercurial medicines.[3]

[1] ℞. Bals. copaibæ, ℥ss;
Tinct. cantharidis, ℥ss;
Tinct. ferri sesquichlor. ℥j. M.
Capt. guttas xxx., ter. die.

[2] ℞. Tinct. cantharidis, ʒj;
Quinæ disulph., ʒss;
Tinct. ferri sesquichloridi, ʒij;
Acid. sulph. dil., ♏ xxx;
Aquæ destillat., ℥viij.
M. ℥j ter. die. (Childs.)

[3] ℞. Hydr. biniodidi, gr. ij;
Potass. iodid., ʒj;
Spirit. vini rect., ℥ss;
Syrup. aurantii, ℥iss. M.
Capt. guttas xxx., ter. die.

CHAPTER VI.

OF DISEASES WHICH COMPLICATE OR SUCCEED TO GONORRHŒA IN THE MALE.

THE diseases which complicate, and succeed to gonorrhœa in the male, are exceedingly varied and numerous, and very frequently of much more consequence than the original affection, to which, however, they are in most instances strictly due. The following are those which I have most commonly observed and treated.

Occasionally when a patient has suffered from gonorrhœa, and when the more prominent features of the disease have altogether subsided, the patient, after micturition, finds that he has not completely emptied the urethra, although he fancied that he had done so; the water comes away in drops, or in a stream, for some minutes or even longer, wetting the linen, and rendering him extremely uncomfortable. This I attribute to an alteration in the natural elasticity of the urethra, for on examination no stricture is to be found. The proper remedy is the bougie; one of large size should be introduced three times a week, and suffered to remain in the urethra for an hour, if no irritation be produced.

Strictures in the urethra are almost always the consequence of protracted gonorrhœal inflammation, seated in one or more points of the urethra, which, ultimately extending to the subjacent tissues, occasions thickening, induration, or vegetation. These are the diseases which, in the expression of Desruelles, an imprudent youth bequeaths to adult age, and which, in certain instances, at more advanced periods, render the patient's life miserable. In the advanced stages of chronic gonorrhœa, recourse should be always had to the bougie, which should occasionally be passed, with a view of preventing contraction or thickening of the passage, and promoting the absorption of any submucous deposit, or effusion, that may have taken place.

When a gonorrhœa is seated in the deeper parts of the urethra, in the membranous or prostatic portions, the rectum is sometimes

sympathetically affected, and the patient very often suffers from severe pain in the fundament, and a very troublesome tenesmus. This sympathetic irritation is carried in some cases so far, particularly if the patient have used much exercise during the course of his disease, that inflammation is set up in the subcutaneous cellular tissue surrounding the anus, and abscesses form. If circumscribed swelling, with heat and tenderness in the vicinity of the anus, come on during the course of gonorrhœa, the parts should be freely leeched, and the patient subjected to the recumbent position, and perfect quietude. Supposing these means have little or no influence over the circumscribed induration, and the presence of matter be suspected, this should at once be discharged by a very free incision: if a puncture instead of an incision be made, the matter in all probability will not get free vent, may burrow up by the side of the rectum, and a true "fistula in ano" may ultimately ensue. I have seen two or three instances in which such a result has taken place.

Although gonorrhœa is not generally followed by secondary symptoms, properly so called,[1] it appears to dispose the economy, either from sympathy, metastasis, or other causes, to several diseases of a very important nature. One of these diseases is gonorrhœal rheumatism, which makes its appearance under two forms; the first seated in the joints, and resembling very much synovitis from other causes; the second confined more to the muscles and aponeuroses, and affecting the fleshy parts, such as the shoulders or hips. In some instances these diseases are owing to a sudden sup-

[1] Two classes of constitutional diseases or secondary symptoms, properly so called, succeed to discharges from the urethra, which resemble gonorrhœa: the first are acute, and succeed to the quick suppression of a free discharge; the second are chronic, and resemble the ordinary forms of secondary syphilis generally. The following case illustrates the first-mentioned affection:

CASE X.

A very healthy young man contracted gonorrhœa, which was marked by profuse discharge. He consulted a druggist, who prescribed for him an injection, which he used very freely, and dried up the discharge. Soon after its suppression a bubo formed in the right groin; and its appearance was succeeded by an eruption of red blotches over the whole body, and superficial redness of the fauces. At this period I was consulted; the skin disease was an acute syphilitic roseola; the redness died away into a marked copper coloured mottling.

Cazenave says, "This is the form of skin disease (roseola syphilitica,) which generally appears when a gonorrhœa has been suddenly suppressed, either by injections or large doses of copaiba." In the above instance, no copaiba had been taken, although this is commonly called the "copaiba rash."

pression of the gonorrhœal discharge, whilst in others they bear a strict relation to the condition of the local disease, the rheumatic symptoms yielding as the discharge lessens, and returning with increased force, when, from any circumstances, the gonorrhœa becomes worse. When these forms of rheumatism complicate gonorrhœa, or appear to be produced by it, the gonorrhœa itself is generally very troublesome to cure. The treatment will depend altogether upon the form under which the rheumatism is manifested. If synovitis be present, it may be necessary to leech the affected joints, whilst the patient takes, in combination with the ordinary specific remedies, colchicum, camphor, or opium.[1] If the disease be owing to a sudden suppression of the discharge, it has been recommended to bring it back by introducing a bougie, smeared with gonorrhœal matter into the urethra. The warm, but more particularly the vapour-bath, is an important adjunct to any internal treatment that may be adopted.

Pure gonorrhœal ophthalmia may arise—1st, From the direct application of gonorrhœal matter to the eye; 2dly, From metastasis; and, 3dly, It has been supposed to be due to sympathetic irritation merely, without either the direct application of gonorrhœal matter or from metastasis. Some writers have denied that the direct application of gonorrhœal matter to the eye of the same individual has power to produce the first form of the disease, and this was the opinion of Dr. Vetch. Numerous cases, however, establishing the fact that gonorrhœal matter produces the most destructive form of inflammation of the eye, have fallen under my own notice, and under that of all modern surgeons who have written on the disease. In the second form of the disease the eye is supposed to suffer from metastasis, analogous to those successive attacks of different parts which are observed in gout or rheumatism.[2] That this form of ophthalmia is not caused, like the preceding, by the direct contact of matter from without is demonstrated by the fact that it has been observed to occur more than once in the same individual, although every means had been most carefully employed to protect the eyes from contamination.[3]

[1] ℞ Ext. colchici acetic., gr. j ad gr. iij;
Camphoræ, gr. iij;
Pulv. opii, gr. ss;
Ft. pil. ter die sumenda.

[2] Lawrence; on the Venereal Diseases of the Eye, p. 34.

[3] Wallace, op. cit.

Mr. Lawrence thinks "as much blood should be taken from the arm as will flow from the vein, and that the evacuation should be repeated as soon as the state of the circulation will allow us to get more." (p. 36.) Blood must also be taken from the temples by cupping, and by the free application of leeches round the part, until the pain and vascular congestion is relieved. Mr. Wardrop goes so far as to say that the only case of gonorrhœal ophthalmia he had seen, in which the eye was saved, was that of a young woman, in whom venesection was repeated as often as blood could be got from the arm. Bleeding alone, however, must not be depended on; but at the very commencement of the disease local applications of an astringent character, hereafter to be mentioned, must be combined with it. Notwithstanding these authorities, "it is stated that the gonorrhœal discharge is suppressed, and that the inflammation of the eye occurs in consequence of that suppression." This view is supported by Richter, Scarpa, and Beer, and they consider the restoration of the discharge from the urethra as a principal indication in the treatment. I have never seen a well-marked case of this kind, though there are many on record. I have seen the most acute ophthalmia associated with profuse discharge from the urethra. Swediaur has collected a few cases, in which the return of discharge from the urethra cured an ophthalmia which had arisen from its sudden suppression, and which had resisted the usual modes of treatment. The third form of gonorrhœal inflammation of the eye is that which occurs during the continuance of a clap, without the direct application of the matter, or without the suppression of the discharge. "Since, then, gonorrhœal ophthalmia may occur whilst the discharge from the urethra continues, and since it does not take place when that discharge is stopped, we cannot admit that the affection of the eye owes its origin to the cessation of disease in the urethra."

We are disposed to think that bleeding has been too exclusively relied upon in this disease, which is, in its commencement, purely local; and Mr. Lawrence himself is dissatisfied with the results of the cases treated exclusively on this plan, although he attributes its want of success to its not having been employed to a sufficient extent. However, he mentions a case (Case 5,) in which blood was taken very largely, both locally and generally, and other powerful antiphlogistic means were resorted to, yet the eye was lost. Mackenzie says, "bleeding alone must not be depended on;" and O'Halloran is of opinion that, if an inquiry were instituted amongst

army surgeons, it would be found that those who had used the greatest depletion were the least successful practitioners.

Directly after the system has been depressed by loss of blood we must have recourse to local, astringent, or specific remedies. Amongst these may be mentioned, as entitled to most confidence, the solution, or pomade of nitrate of silver. The former may be employed in the proportion of ten grains to the ounce of water, dropped into the eye at the very commencement of the disease. O'Halloran "had become dissatisfied with the antiphlogistic treatment, from having found it frequently insufficient. I was hence led to use astringents, not only in the early stage of the disease, but when the purulent discharge and chemosis were fully established. He employed the sulphate of copper in substance, rubbing with it the inner surface of the eyelids after everting them, or he dropped into the eye the ten-grain solution of the nitrate of silver."[1] Mr. Lawrence mentions two cases where this treatment was successful. Most modern authors are agreed upon this plan of treatment, and use as astringents a solution of the nitrate of silver, of the sulphate of copper, or a pomade of the first-named salt. I have seen one case in which a solution of the sulphate of copper was completely successful, when the nitrate of silver in the same form appeared to do little good. In the intervals of the dressings the eye is to be covered with a compress soaked in the Liquor aluminis compositus diluted. The extract of belladonna may be rubbed over the temples, and round the orbit, during the treatment, with a view of preventing any adhesions of the iris, which commonly becomes affected, as well as the other deeper-seated structures of the eye. If the chemosis be great, Ricord recommends a portion of it to be removed with a pair of scissors, a practice of which Dr. Mackenzie speaks also in very high terms.

It is perfectly useless, not to say criminal, in such cases, to waste the time, so precious to our patient, in administering the remedies looked upon as specific in gonorrhœa, such as copaiba and cubebs, recommended by Dr. Wallace. "The anti-gonorrhœal remedies, properly so called, have absolutely no action upon the disease, whatever be their mode of administration." The testimony of modern experience is against the use of mercury in the acute forms of this disease; we lose time, and compromise the vision of the patient, by relying upon it in this stage; in the chronic forms it may be employed with a reasonable prospect of success.

[1] Lawrence, p. 44.

Those authors who support the view of gonorrhœal ophthalmia being produced by metastasis place great stress upon the restoration of the urethral discharge; it is also recommended in cases where this ceases during an attack of disease of this character. Swediaur, Richter, Beer, and Scarpa, recommend the introduction of a bougie smeared with the discharge from the eye, or with gonorrhœal matter taken from another patient. In spite of the authorities of these names, I think their advice rather the result of preconceived theoretical notions than the deductions from the results of treatment. Mr. Lawrence supports the latter opinion, and the modern writers of greatest experience agree with him. "If," says Ricord, "the discharge from the urethra is for a short time diminished during an attack of gonorrhœal ophthalmia, it is never completely suppressed, and we can affirm, in spite of contrary opinions, that not the least benefit is to be expected from attempting to increase or restore it," (p. 763.) Swediaur appears to have been successful in some chronic cases of this character by the restoration of the urethral discharge; but I cannot find in any late writer, neither have I ever seen a case supporting the efficacy of this treatment.

Many modern surgeons admit a true gonorrhœal inflammation of the iris. This generally occurs in scrofulous patients labouring under gonorrhœa or gleet. Sometimes it succeeds to gonorrhœal inflammation of the conjunctiva or the sclerotic, or occurs with that peculiar species of rheumatism which sometimes accompanies a gonorrhœa. It very commonly alternates with affections of the joints, and an acute attack of synovitis frequently cures or very much relieves the inflammation of the eyes. The frequency with which this species of disease succeeds to mild gonorrhœal ophthalmia, and the facility with which adhesions of the iris take place renders it necessary that in the various forms of gonorrhœal ophthalmia we should adopt the plan of keeping the pupil dilated by the external application of belladonna. "This affection of the eye is exactly the same as rheumatic inflammation of the sclerotic and iris occurring independently of gonorrhœa. Both this and the mild purulent inflammation of the conjunctiva are to be regarded as rheumatic affections of the organ excited by gonorrhœa; that is, they take place in individuals in whom this constitutional disposition is shown by inflammation affecting either the synovial membranes or the fibrous structures of several joints."[1] Dr. Vetch has

[1] Lawrence, p. 57.

given cases of this disease. In one instance the gonorrhœa was well-marked and violent, and was succeeded by a swelled testicle; rheumatic inflammation of the joints and of the external proper tunic of the eye followed. They terminated in an irregular and contracted pupil, some opacity of the capsule of the lens, adhesions between it and the iris, and a considerable loss of vision. Generally, however, the prognosis is favourable, and the disease very much more under the control of art than the more acute forms of purulent ophthalmia. "The gonorrhœal is generally more rapid in its progress than any of the other varieties of iritis, and is one of the most severe and formidable whilst it lasts; but it yields more promptly to decided treatment than any of the rest, and affords examples of perfect recovery even when the aqueous chambers are filled with lymph."[1]

The treatment must consist, in the onset, of general and local bleeding, suited to the urgency of the symptoms; calomel and opium, so as rapidly to affect the system, and the application of the extract of belladonna. Our chief reliance is to be placed upon mercury united with opium and antimony; and if there exist a rheumatic state of the system, colchicum and turpentine will be useful. Sir B. Brodie places great reliance on colchicum. As local applications, warm decoctions of poppy are generally agreeable to the patient's feelings on account of the great pain that sometimes attends the disease. "When the inflammation is checked, blisters may be advantageously employed, and the cure may be completed by Plummer's pill, with mild aperients and regulated diet."

Perhaps the most frequent disease which succeeds to gonorrhœa is an inflamed testicle, known also by the name of epididymitis (from the constant pathological changes found in this part,) orchitis, and hernia humoralis. It is not often that an opportunity is afforded of seeing the changes which take place in the testis, or its envelopes, in consecutive gonorrhœal inflammation; nevertheless, dissections of testes which have been the seat of such diseases have been recorded by M. Gaussail,[2] Mr. Curling,[3] Sir B. Brodie,[4] and Sir A. Cooper.[5] The epididymis, in such instances, is enlarged to

[1] Mackenzie, p. 476.

[2] Mémoire sur l'Orchite blennorrhagique, 'Archives Générales de Médicine,' Jan., xxvii., p. 210.

[3] On Diseases of the Testes, p. 254, &c.

[4] London Medical Gazette, vol. iii., p. 219.

[5] The Anatomy and Diseases of the Testes, p. 80.

twice or thrice its natural size, this enlargement being produced by the effusion of a brownish deposit between the convolutions of the duct. The indurations felt on handling the epididymis are generally the result of adhesions only, and not due to an effusion into the interior of the duct. This, I think, is proved by the fact, that the viril power is not impaired generally after ordinary attacks of gonorrhœal orchitis. The coats of the vas deferens are thickened and injected, and an albuminous deposit is found in the cellular tissue around the tortuous part of the vas deferens and tail of the epididymis. Marks of inflammation are also found in the tunica vaginalis, consisting of effusions of lymph and bloody serum, loose adhesions, and general vascularity of the membrane. It is owing to the extension of inflammation to the tunica vaginalis that is due the intense pain and tenderness which accompany consecutive orchitis. The body or glandular structure of the testes is frequently affected; and in instances where testes, which have been previously the seat of consecutive gonorrhœal examination have been examined, the tubular or proper secreting structure has been more or less disorganized; in the case dissected by Sir B. Brodie and Sir A. Cooper, one-third of the tubules had become converted into a white fibrous substance, and "were rather chords than tubes." On handling testes which have been the seat of consecutive orchitis, although little change appears in the body of the gland itself, the epididymis is always found enlarged to a greater or less degree, and I believe this condition seldom entirely disappears.

This disease hardly ever occurs during the first,[1] or even in the second week of a gonorrhœa, more commonly in the third. The disease has been supposed to originate in two ways, from the direct propagation of inflammation from the ejaculatory ducts to the vesiculæ seminales, and through the vas deferens to the epididymis. Cullerier believes that it is owing to the direct propagation of disease along the seminal passages, and not to metastasis. The longer the continuance of a gonorrhœa, the more likely is it to be thus complicated; the best way to prevent it is to cure the disease as quickly as possible. Amongst other causes are exercise, constipation, the neglect of the suspender, free living, and the use of stimuli during the course of a gonorrhœa. Amongst the predisposing causes of this affection may be enumerated fatigue, violent exercise, repeated sexual intercourse, and any circumstance pro-

[1] Not once in three hundred times. (Ricord.)

ducing excitement of the organs of generation. Various occupations predispose to it, as those of weavers, turners, grooms, and all trades where the testes are exposed to frequent friction. "A flaccid state of the scrotum is also to be ranked amongst the predisposing causes: a strong cremaster and firm scrotum are rarely met with in individuals suffering from swelled testicle."

It is generally believed that the discharge of a gonorrhœa is diminished, or disappears altogether, when the testicle becomes inflamed: this, though most commonly the case, is by no means a constant occurrence. Hunter long ago remarked, that there were cases in which the discharge rather increased than diminished, when the testicle became inflamed. In the cases analyzed by M. Gaussail, and M. d'Espine,[1] the discharge was generally lessened when orchitis supervened, although in many of the cases it underwent no change, and in some was increased. A patient is never free from the risk of a swelled testicle as long as gonorrhœal discharge remains. I have known it occur where disease had existed six months.

A swelled testicle is not caused, in ordinary cases, by the use of injections, or the quick suppression of the discharge, but by the extension of the inflammation in the manner already named. The tables of M. Gaussail show that swelled testicle is much more frequent in the fourth and fifth weeks of the disease; hence the quicker the primary affection is cured, the less chance there is of consecutive inflammation of the epididymis and affections of the testicles.

The judicious use of injections and specific remedies certainly does not produce an inflamed testicle. More risk of this is seen by suffering the discharge to continue week after week, than by the employ of specific remedies and injections, after the tenth or twelfth day.

It is not improbable that in certain positions of the testes, and where an irreducible scrotal hernia is present, a swelled testicle may be mistaken for a strangulated hernia. I attended a gentleman for gonorrhœa who had an irreducible scrotal hernia of the right side. In the third week of the disease, after a long walk, he became affected with swelled testicle on the ruptured side; this was accompanied by constipation, vomiting, tenderness of the abdomen, and other symptoms common to strangulation of the bowel;

[1] Mémoire Analytique sur l'Orchite Blennorrhagique.—Mémoires de la Société Médicale d'Observation, tom. i., p. 494.

for two days the case had a very formidable aspect. Mr. Acton[1] has recorded a curious and instructive case bearing upon this subject. "A young man, 24 years of age, was in the habit of amusing himself, when a boy, by pushing his testicles into the abdomen. Two months previous to his admission into the hospital he contracted a gonorrhœa which discharged profusely; he continued, notwithstanding, his employment. In about a fortnight after, he felt a painful sensation in the left groin; and this becoming worse, he entered the hospital a month after the commencement of his complaint, suffering under great pain in the inguinal region, which was greatly inflamed, whilst pressure on that part produced that peculiar feeling, but in a greater degree, which is excited when the testicle itself is compressed. On examining this patient, no testis was found on the left side of the scrotum, but, on passing the finger into the left inguinal canal, a rounded body was distinctly felt, resembling the testis in shape, and the patient stated that he experienced a similar pain to that felt when the testicle on the opposite side was squeezed."

This case was recognised as one of ordinary swelled testicle, notwithstanding the unnatural position of the organ. It is not improbable that such a case might be mistaken for a strangulated inguinal hernia, more particularly when such symptoms as vomiting, constipation, and tenderness of the abdomen are present. The history of the concomitant affection, and the absence of the testes in the scrotum, are the chief points which should decide the surgeon. Should such a case coexist with a strangulated hernia, it would form a curious and puzzling complication, and one which would render the operation extremely embarrassing.[2]

If gonorrhœal epididymitis occur with any degree of intensity, the disease soon involves the neighbouring tissues of the testicle; and hence we observe speedily succeeding to it, or complicating it, diseases of the tunica vaginalis, or testicle itself, and very commonly inflammatory hydrocele, œdema, erysipelas, or phlegmon of the scrotum.

This disease is prevented by the antiphlogistic treatment of gonorrhœa, the use of the suspender, and the early employment of

[1] On Venereal Diseases, p. 95.

[2] A. L—, æt. 32, was admitted into the Queen's Hospital with gonorrhœa; he had a large painful tumour in the inguinal canal, and only one testicle in the scrotum. This was a case of orchitis, the testicle being fixed in the inguinal canal.

A boy, æt. 14, was admitted into the Queen's Hospital, having a tumour in the right inguinal canal, hard, tender, and inflamed; it was clearly an undescended testicle, there being but one gland in the scrotum.

specific anti-gonorrhœal remedies, as copaiba, cubebs, &c. When once set up we must employ general bleeding, if circumstances require it, or local bleeding from the region of the spermatic chord, or perineum; the patient must keep the testicle suspended, and remain in the horizontal position. To relieve the pain, which is sometimes very acute, frictions upon the testicle with oil, opium, or belladonna, &c., may be employed.[1] When the acute symptoms have in some measure subsided, the most efficacious practice is compression of the testicle by strapping. This practice generally succeeds in curing most forms of epididymitis in five or six days, and has the advantage of not confining the patient. I have repeatedly employed it from the very commencement of the disease with the most complete success.[2]

The plaster is to be cut into thin straps, and applied in a circular manner round the testicle, drawing this organ, as far as can be done without pain, to the bottom of the scrotum, and taking care not to pucker the skin in applying the plaster.[3] The first strap is placed

[1] ℞. Olei camphorati, ℥j;
Tinct. opii, ʒj. M. Ft. liniment. Or,
℞. Adipis, ℥j;
Ext. opii, ʒij. M. Or,
℞. Adipis,
Ext. belladonnæ, āā ℥j. M.

[2] The emplastrum "de Vigo" is generally employed for this purpose in the French Venereal Hospitals; it resembles much, though is in some points superior to, the Emp. ammoniaci cum hydrargyro of the London Pharmacopœia. The form is as follows:

℞. Hydrargyri, 95 parts;
Styracis liquidæ, 48 parts.

These are to be rubbed together till the globules of mercury disappear; then melt together, in a separate metal pot,—

Emp. plumbi,	312 parts;
Ceræ flavæ,	16 "
Terebinthinæ puræ,	16 "
Picis Burgund.,	16 "
Gum ammoniaci,	10 "
Olibani,	5 "
Myrrhæ,	5 "
Croci in pulv.,	8 "

These ingredients are to be well mixed, first among themselves, and then with the mercury and styrax. The plaster thus made is to be spread upon linen, calico, or thin leather, and then cut into strips of convenient thickness.

[3] The best plaster for strapping the testis is composed of soap, belladonna, and adhesive plasters, in about equal proportions, carefully spread on thin, firm leather, and then cut into thin straps. The mercurial plaster sometimes irritates the scrotum. The one I have mentioned I now always employ.

circularly round the testicle at the insertion of the chord, compressing the organ as much as the patient can bear; a succession of straps are then applied till the organ is covered: and a second series of straps then placed over the circular ones from below upwards, and over these again a few more circular ones to keep the whole in place. If the pressure of the plaster occasions pain or irritation, the straps are to be removed till the inflammation or sensibility is more diminished; in many instances the patients experience relief directly the testicle is supported by the plaster. In spite of the sneers of a modern writer, strapping the testis is a very valuable remedy in consecutive gonorrhœal orchitis. I have tried it in syphilitic sarcocele, and other chronic diseases of the testis, without benefit. As a general rule it should not be employed till the more acute symptoms have somewhat yielded. The size of the testis rapidly diminishes under it, so that the straps want reapplying at the end of about the third day.

During the local treatment of the disease, the patient is to persevere in the use of specific anti-gonorrhœal remedies; the copaiba and cubebs; and a mild mercurial course may be recommended, to remove any thickening or enlargement which remains after the more acute symptoms have subsided.[1]

A chronic enlargement of the testis, sometimes occurring alone, and sometimes complicated with hydrocele, occasionally remains after the subsidence of the more acute symptoms accompanying a swelled testicle. For this affection compression is of little use. I believe the proper remedy to be the hydriodate of potass, with alterative doses of mercury, and the external application of the tincture of iodine, or the iodide of lead ointment. Mercury pushed to salivation is occasionally of great service in these consecutive diseases of the testicle and its envelopes.

In some constitutions gonorrhœa leaves behind it a general weakness and irritability of the organs of generation, and an alteration in the character of their secretions. The semen is scanty and devoid of its characteristic smell; it is thin and watery, and ejected languidly during coition; very quickly, and without sensation.

[1] ℞. Hydrarg. chlorid., ℈j;
Pulv. v. Ext. conii., ℈ij;
Sapo. dur., ℈ij. M. ft. pil. xxiv. Or,
℞. Pil. hydrarg., gr. v;
Camphoræ, gr. iij;
Pulv. v. ext. opii., gr. j. M. ft. pil. q. o. n. d.

When the bowels are evacuated there is occasionally forced from the urethra a thin substance like gum, which has a soapy feeling when rubbed between the fingers. This is no doubt a vitiated hyper-secretion which hangs about the relaxed mucous membrane of the urethra, the lacunæ, and the ejaculatory ducts, and which is forced from the urethra by the action of defection.[1] At the same time the penis and scrotum are flaccid, and the reflex actions of the erector and ejaculatory muscles are with difficulty excited. With these symptoms there commonly exists weakness and trembling of the legs, and a general lassitude of the whole system.

The balsams and turpentines, with the preparations of steel, and cantharides, are very useful in such states as general remedies. Tonic and stimulating injections should also be practised with a syringe perforated on the sides so as to inject the lacunæ of the urethra, which are commonly the principal seats of disease. Friction of the loins, scrotum, thighs, and penis, with warm spirituous embrocations, should be practised at the same time. Pain, heat, and various forms of irritation sometimes affect the penis after an attack of gonorrhœa. Many of these symptoms are disordered sensations merely. They may or may not be associated with the various forms of discharge already alluded to, or they may again be indicative of some pathological change in the urethra, such as stricture, upon the earlier stages of which they are occasionally dependent. In all cases, before forming a plan of treatment, the passage should be carefully examined by the bougie, which is, in such cases, very commonly the most efficient remedy in their cure. Great caution, however, is necessary in the employment of bougies in an irritable urethra. I have been consulted by several unfortunate patients who have suffered from these neuralgic conditions of the urethra, who have wandered from surgeon to surgeon; and where the too frequent, and perhaps injudicious use of instruments has terminated in perineal abscess, in chronic orchitis, or irritable testis.

Many writers have alluded to gonorrhœa of the rectum, a disease happily rare in this country at least. I have seen but one well-marked case, in which the cause and nature of the disease were

[1] This fluid, though chiefly composed of vesical or prostatic mucus, sometimes, but not always, contains spermatozoa. I have examined it in a great number of cases. It is occasionally altogether composed of peculiar corpuscles, with which, at times, a few spermatozoa are mixed. The remedies are injections, practised through a catheter passed down to the prostatic portion of the urethra.

frankly admitted by the patient. The first symptoms were those of acute inflammation; the anus was swollen, red, exceedingly tender and painful, and the seat of a profuse purulent discharge; the symptoms were sufficiently severe to confine the patient to bed for several weeks. They were slowly subdued under rest, a low diet, leeches, fomentations, and weak astringent injections. I have seen this patient at intervals, for seven years, and even now much irritation remains, with occasional discharges of pus; the fæces also occasionally being more or less covered with purulent matter. On examination with the speculum the mucous membrane of the rectum appeared vividly and generally red, but no ulceration was present. In cases like the present an antiphlogistic treatment appears the only one applicable, combined with injections of cold water or weak solutions of the sulphate of zinc, the acetate of lead, or nitrate of silver; these should be thrown up in large quantities by a common enema syringe. Specific remedies are useless; it is a singular fact that it is only over the urethral form of gonorrhœa that the so-called specific remedies appear to exert any influence.

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CHAPTER VII.

OF GONORRHŒA IN THE FEMALE.

GONORRHŒA in the female is for the most part a disease of very different character to that in the male; the anatomical structure and functions of the organs implicated modifying the affection both in its seat, its course, its treatment, and its terminations.

This disease recognises for its pathology, acute or chronic inflammation of the vulva, vagina, uterus, or urethra; the inflammation itself being of a specific character, and capable of producing gonorrhœa in the male. Pathologists have as yet failed in establishing any differential diagnosis between a specific and an ordinary inflammation of the parts mentioned. "It is a singular pathological fact that although the existence of a specific and contagious form of vaginitis is generally admitted, yet it is difficult, if not impossible, to point out any decided characteristic by which it may be distinguished from ordinary vaginitis. Like all those who have preceded me, I am unable to indicate satisfactorily any absolute means of distinguishing between simple inflammation of the vagina and gonorrhœal inflammation, though I believe the difference does exist."[1] Certainly there is a gonorrhœal virus, although it cannot be demonstrated. In the female, gonorrhœa is not confined to the urethra; it is seated in the mucous membrane reflected over the neck and mouth of the uterus, in the vulva, or the vagina and its follicles, and the vulva vaginal gland.[2]

We have to consider:

1st. Urethral gonorrhœa, the type and model of gonorrhœa or blennorrhagia properly so called; eminently contagious.

2d. Vaginal discharges, termed gonorrhœal or blennorrhagic, much more common than the preceding, particularly in females of loose character, the precise nature of which it is often very diffi-

[1] A Practical Treatise on Inflammation of the Uterus, its Cervix and Appendages, &c., by James Henry Bennet, M. D., 3d edit., p. 218.

[2] Huguier; Mémoires de l'Academie de Médicine, vol. xiv.—J. H. Bennet, op. cit., p. 213.

cult to determine; nevertheless the vagina may be the seat of a pure specific gonorrhœa, either alone or complicated with urethral gonorrhœa.

3d. Uterine gonorrhœa or blennorrhagia, capable of producing a similar disease in the male. The uterine discharge continues long after the other forms have been cured, and is contagious, although it resembles mere leucorrhœa.

The ordinary pathological changes found in females who are known to have produced gonorrhœa in the male, are found in the labia, in the vulva, the vagina, the meatus urinarius, and the lips and mouth of the uterus. The labia majora are generally more or less swollen; on everting them, their internal or mucous surface is red and inflamed, uniformly, or in patches; or again it has an aphthous, patchy appearance, especially in old cases: the surface is sometimes studded with warts, and occasionally the whole labia are converted into a condylomatous mass, which runs backwards along the perineum to the margin of the anus, which is surrounded by similar growths. Sometimes a similar condition of the mons veneris exists, but this is comparatively rare. If the seat of the complaint affect the vulva, the labia minora are also red and swollen, and the entrance to the vagina contracted, red, and intensely tender in acute cases; between the folds of the labia, a white sticky secretion is found, like that under the prepuce in balanitis in the male. The irritation, itching, and pain, are intolerable in gonorrhœa, where the vulva is especially affected, particularly in cases where a newly-married female, previously healthy, has been diseased by the husband, who has married with an uncured blennorrhœa, a circumstance not very uncommon.

When the vagina is affected in gonorrhœa, it is contracted, red, and painful, and the rugæ red and elevated; the inflammation rarely affects the whole vaginal surface at once, that part under the arch of the pubis being most frequently the seat of disease. In acute gonorrhœal inflammation of the vagina, the speculum should not be used till the more acute symptoms have subsided.

The labia and os uteri are very greatly affected in gonorrhœa. In seven out of nine cases examined by Mr. Whitehead, the disease was confined to the uterus, in two the vagina was affected, in one the urethra. The truth is that the gonorrhœal inflammation of the vaginal surface of the uterus is very commonly combined with affections of the vagina, and hence these forms have commonly been described as utero-vaginal. In some rare cases the canal of the

neck only is affected, without participation of the vaginal portion of the uterus, and these are the cases in which some continental practitioners have proposed injections into the uterine cavity itself. When we consider the elaborate organization of the mucous membrane lining the canal of the cervix, as revealed by the dissections and microscopical examinations of Dr. Tyler Smith,[1] we must be quite aware that a local treatment is essential in this form of disease.

The urethral form of gonorrhœa in the female is rarely met with alone, it sometimes complicates the other forms. M. Ricord says, in two thirds of the cases, in my own practice, I have not found it so frequent.

In addition to the pathological conditions just mentioned, abscesses very commonly form in the vagina and perineum.

In the more acute forms of the disease, a strictly antiphlogistic treatment and regimen must be adopted: aperients, the warm bath, emollient fomentations and poultices, and injections or rather continual irrigations of the parts, by means of a self-acting syringe, with sedative, demulcent, or slightly astringent fluids.

In the earlier and more acute stages of the disease, it is not prudent, and sometimes not always safe, to have recourse to the speculum to ascertain whether the gonorrhœa is complicated with venereal ulcerations or not; our first duty is to subdue the acute inflammatory symptoms, and then if the chronic stage be protracted, or do not yield to treatment, and there is reason to suspect the existence of deep-seated ulcers, the speculum may with propriety be used to clear up our diagnosis.

The internal treatment of gonorrhœa in the female is very limited. The remedies which are considered specific in this disease in the male, as copaiba, cubebs, &c., are here almost inert. Their action upon the vaginal forms of the disease is very feeble, a little more energetic over the urethral varieties. Aperients, with diluent and demulcent drinks, constitute nearly the whole of our resources, under the head of internal treatment. Mercury appears useless in the uncomplicated forms of the disease, except with a view of removing any chronic enlargement or thickening which may be the result of long-continued chronic inflammation. The treatment is then to be the same as that we recommended, when speaking of the use of mercury in gonorrhœa in the male.

[1] Medico-Chirurgical Transactions, vol. xxxv.

The local treatment of acute vaginitis or urethritis in the female consists in the use of emollient and narcotic fomentations and injections. This treatment, however, should not be long continued, if ineffectual; for we frequently find rest, emollient and narcotic applications of little use, the patient still continuing to suffer from severe pain, and an abundant puriform discharge, whilst the mucous surfaces of the vagina, &c., continue red, and turgid with blood. The nitrate of silver may now be employed with the best effects, either by passing solid nitrate over the diseased surface, or in form of injection.[1] When the acute stage has in some measure given way, we may have early recourse to astringent injections, with a view of preventing the discharge assuming the chronic form, and thus continuing for an indefinite period. The preparations of lead[2] or alum[3] may be employed for this purpose.

When the more acute stages of disease are passed, and the chronic form continues but little influenced by remedies, it will be well to examine the mucous surfaces of the vagina, &c., by means of the speculum. These may be found in several pathologic conditions; simply red, turgid, and hypertrophied, or covered with red isolated patches, aphthæ, vesicles, pustules, or superficial ulcerations. After the continuance of the disease for some time, the os uteri is always more or less affected; its lips are turgid, red, and everted, and generally covered with small ulcerations, granulations, or other changes, the result of chronic inflammation.

In the chronic forms of the disease, unattended by change of structure, as local applications or injections, we may employ solutions of tannin,[4] kino,[5] the infusion of roses with bark,[6] alum or

[1] ℞. Argent. nit., gr. x.
Aquæ, ℥j. M. ft. injectio.

[2] ℞. Aquæ, Oij;
Plumbi acet., ʒiij ad ℥ij. M. ft. injectio.

[3] ℞. Aquæ, Oij;
Aluminis sulph., ʒiij ad ℥ij. M. ft. injectio.

[4] ℞. Tannin, ℈ij ad ʒj;
Vini rubri, ℥vj. M.

[5] ℞. Gum. kino, ʒj ad ʒij;
Aluminis sulph., ℈j ad ʒss;
Aquæ ferventis, Oij. M. (Swediaur.)

[6] ℞. Infus. rosæ comp., Oij;
Pulv. cinchonæ, ℥ij. M. (Hôtel Dieu.)

myrrh and catechu,[1] &c. &c. The solutions of the chlorides of soda or lime are chiefly of use when the discharges are offensive and accompanied by ulceration.[2] When the gonorrhœal discharge is secreted by the mucous surfaces of the vagina, these applications may be thrown up with an ordinary female syringe; when, however, the os uteri or its neighbourhood is the seat of the disease, it becomes absolutely necessary to use a syringe, by which a continual irrigation can be kept up; in this way a pint or several pints of injection may be thrown slowly up, without removing the pipe or tube of the syringe.

When the chronic state of gonorrhœa in the female is accompanied by any alterations of tissue, these changes demand our first attention, since it is useless to attempt to check the discharge as long as these conditions remain upon which it depends. Ulcerations or papulous granulations should be cauterized with the nitrate of silver, or, what is better, with the acid nitrate of mercury.[3] This caustic is to be applied by means of a camel-hair pencil, or a small roll of lint, to touch the diseased surfaces, these having been previously cleansed by dry lint or a soft sponge. When ulcerations themselves have destroyed the tissues more or less deeply, caustics must be employed with extreme caution. In these cases M. Ricord covers the surface of the ulcers with calomel, upon which he places some dry soft lint, and afterwards passes into the vagina some lint soaked in one of the astringent or tonic injections previously mentioned. Where the disease has extended more or less into the canal of the cervix, and has assumed a form of disease termed uterine gonorrhœa or catarrh, the solid nitrate should be introduced, and the mucous surface lining the neck well rubbed with it.

A true vaginal gonorrhœa may be confounded with acute or

[1] ℞. Pulv. catechu,
P. myrrhæ, āā ʒj;
Liquor. calcis, ʒiv. M.

[2] ℞. Solut. sodæ, chlorid., pt. 1;
Aquæ, pts. 12 ad 16. M.
(Hôpital des Vénériennes.)

[3] To 100 parts of mercury, add, in a retort, 200 parts of nitric acid; when the solution has taken place, reduce to 225 parts by evaporation. This, the acid nitrate of mercury, is a solution of deutonitrate of mercury in an excess of acid, and contains 71 per cent. of the deutonitrate. This agent is a powerful caustic, giving rise to a white eschar, which does not fall off for five or six days. (Dr. J. H. Bennet, op. cit., pp. 278–79.)

chronic vaginitis arising from other causes; and hence arises a question of great delicacy and importance, whether we are in possession of any facts which will enable us to establish a correct differential diagnosis between vaginitis as the result of impure sexual intercourse and those forms of disease which are the result of other causes? "The diagnosis of leucorrhœa," says Dr. Churchill,[1] "is, according to all authorities, extremely difficult." Sir C. M. Clarke seems to think it impossible. I have already quoted Dr. Bennet's opinion on this point.

In gonorrhœa the discharge is generally more frequent and the inflammation more acute than in leucorrhœa. In the former disease the glands of the groin are more frequently enlarged, tender, and painful, and in gonorrhœa the affection extends to the urethra in about two-thirds of the cases.[2]

Many causes contribute to render the treatment of gonorrhœa in the female tedious and unsatisfactory, and a disease more difficult to cure in this sex than in the male. The recurrence of the menstrual period is constantly interfering with the success of treatment; and a gonorrhœa that has been almost subdued in the interval, is renewed with all its intensity at the time of menstruation.

I believe that gonorrhœal diseases in the female are very rarely completely cured. This, in most cases, arises either from neglect on the part of the patient, or the want of a proper knowledge of the disease, careful examination of the parts affected, and an appropriate topical medication on the part of the surgeon. If Mr. Whitehead's notion be correct, that the canal of the cervix is the first part affected, and the vaginal or urethral mucous surfaces are only secondarily diseased, the disease is not likely to be cured without topical applications to the primary seat of complaint. M. Vidal de Cassis[3] and M. Mercier have described gonorrhœal affections of the uterus and of the ovaries, and carrying out an anatomical to a pathological analogy, have described a gonorrhœal ovaritis in the female as the analogue of a swelled testicle in the male.

In affections of the canal of the cervix, or other portion of the internal surface of the uterus, I have been deterred from employing injections into the cavity of this organ by the narration of some fatal issues to such a proceeding; and, indeed, the accounts given

[1] Outlines of the Principal Diseases of Females, &c.; Dublin, 1838, pp. 23–4.

[2] See the paper of M. Ricord, "Mémoires de l'Académie Royale de Médecine," 1833.

[3] Op. cit., p. 127.

by Vidal de Cassis himself, the modern originator of this plan, of the effects produced by such a measure, would hardly tempt me to follow it.[1]

The douche or irrigation of the os uteri, by means of a proper syringe, practised through a bivalve speculum, afterwards placing against the os a piece of lint or sponge soaked in a weak astringent solution, is an exceedingly efficacious plan, and prevents the discharges from the uterus inoculating the mucous surfaces of the vagina.

[1] M. Vidal's favourite injection is a concentrated decoction of the walnut-tree leaf.

CHAPTER VIII.

OF THE SECOND CLASS OF PRIMARY SYPHILITIC DISEASES—ULCERS, THEIR VARIETIES AND CONSEQUENCES.

ALL primary venereal ulcers do not present the same aspect or character, and in this respect differ very materially from each other. They resolve themselves naturally into a few principal forms. These are, 1st. The simple primary ulcer, characterized by negative rather than positive characters, *i. e.* by the absence of induration, irritability, or inflammation; 2d. The irritable; 3d. Those characterized by an excess of inflammation; 4th. The indurated, the induration being a primary feature of the sore, and not being produced by the injudicious use of local stimulating dressings, by which any primary sore may be made to assume an appearance of induration; 5th. Those spreading by rapid ulceration, or covered by sloughs of varied colour and appearance; these varieties being the ulcerative and sloughing phagedæna of authors. The difference in the appearance of primary syphilitic sores depends also on the anatomical organization of the parts on which they are seated. 1st. The elevated chancre is most commonly seated on the internal surface of the prepuce. 2d. On the angle between the glans and prepuce, a common seat of chancre, the bottom of the ulcer has always a honey-comb appearance. 3d. On the side of the frænum the ulcer is deep and burrowing; these last two varieties depend for their peculiarities on the lax cellular tissue of the parts on which they are seated; this ulcer frequently perforates the urethra. 4th. On the glans penis the sore is excavated and hard, with ragged and thick edges, but never burrows, or has that honey-combed appearance at the bottom I have just described; it spreads generally by ulceration on the surface, and not by ulceration in depth. 5th. Chancre in the interior of the fossa navicularis is accompanied by great induration of the glans penis, and very commonly by phymosis: this ulcer also has a tendency to perforate the urethra on its lower part.

Little doubt can generally exist with regard to the nature of a sexual ulcer; the history given by the patient, its situation, with its aspect, are generally conclusive on this point. There may, however, occur cases which may puzzle the most experienced surgeon. The test of inoculation is here very valuable, but unhappily it is only of certain value when positive. If no characteristic pustule be produced, we may certainly assure the patient that the ulcer does not yield any positive evidence of its being syphilitic, and that there is great reason to believe that it is not so. Patients are naturally anxious to know whether an ulcer, following a suspicious intercourse, is a "chancre," *i. e.* a syphilitic sore, liable to be followed by a constitutional taint; and it is most important that the surgeon should be able to give a reasonable and positive opinion on this point. I have shown how far inoculation will aid him. The microscope may also assist us as a means of diagnosis. I have seen a chronic ulcer with induration on the lip and penis, of a syphilitic character, very closely resemble cancer. If the test of inoculation failed in these cases, the secretions may be submitted to microscopical examination, where we should at once distinguish between the pus globule of the syphilitic ulcer and the cancer cell. I have never been able to distinguish by the microscope any difference between the pus of a primary syphilitic sore and that of an ordinary ulcer, and I have never been able to detect the existence of the animalcules, described by Donné as existing in the pus of a chancre.

Primary syphilitic ulcers are commonly situated on the prepuce, the glans, or body of the penis, at the orifice, or other parts of the urethra, on the mons veneris, or lower part of the abdomen; I have seen them also on the tongue and on the finger, and they have been observed also "on the chin, the lips, the scrotum, the anus, and the thigh."[1] Ricord and Vidal have also seen them in the bladder.

The whole probability of success, in what is termed the abortive treatment of a primary syphilitic sore, turns upon the question whether this be at first a local disease merely, or a local manifestation of a constitutional taint. Observation has taught me to believe that the primary syphilitic sore is, in a great majority of instances, a local disease; but there are cases occasionally occurring which seem to favour the truth of the latter position. A pri-

[1] M'Carthy; Thèse inaugurale, p. 13, quoted by Vidal.

mary sore generally appears on the organs of generation, from four to eight days after suspicious intercourse; I have known a month elapse in one case, and three months in another. If, however, a chancre be inoculated the effects are immediate. In the one case, however, the virus is introduced under the epidermis by the lancet, and in the other it only penetrates this membrane by a process of slow absorption. This, I think, will explain what is termed the "incubation" of chancre, and this view is supported by the experiments of Mr. Ceely, of Aylesbury, who tells us that he has frequently succeeded in producing the vaccine pustule by keeping lymph in contact with the epidermis for a certain period of time, "*without abrasion of the cuticle.*"

In cases where long periods have elapsed between intercourse and the manifestation of disease, we must either admit that the virus has lain in contact with the skin for a long time, without producing any effect, or that the local disease then set up is but the first indication of an already existing constitutional taint. The latter opinion has been maintained by Vidal and others, and brought forward as an argument against the abortive treatment of chancre, which I am about to consider. I must confess that I lean to the first opinion, viz., that the virus has remained in contact with the cuticle for a long period without producing its customary effects. We are daily witnessing this period of incubation, extending not only over months but even years, in the development of secondary or constitutional diseases. Again, if the local disease was the first manifestation of a constitutional taint, why is it, under such circumstances, always developed on the part exposed to infection? and why does such a sore precisely resemble an ordinary chancre occurring at the usual period after exposure? Independent of these reasons, the test of inoculation might add additional certainty to the nature of the sore thus produced.

The abortive treatment of a primary syphilitic sore consists in its early and immediate destruction by caustics, the object of which is to eradicate the disease at the onset, and thus prevent all risk of constitutional taint; but in order to ensure this, according to M. Ricord, the chancre is to be destroyed before the fifth day, and this is not to be reckoned as the fifth day from the appearance of the disease, but the fifth day from the "exposure to contagion."[1] If this is the only way, as M. Ricord assures us it is, that constitu-

[1] Ricord's Letters, by Stapleton, p. 39.

tional disease can be prevented, I will venture to assert that we shall not be successful in one case in five hundred. How often does a chancre appear within the fifth day after intercourse? and how rarely again is the surgeon consulted on its immediate appearance? Nevertheless, the destruction of a chancre is to be attempted, unless there are some special contra-indications, as soon as it is presented to our notice; but we cannot say that such destruction will inevitably convert a specific ulcer into a simple one, or prevent the occurrence of constitutional symptoms; it, however, may, and therefore the practice is a safe and a proper one: we gain nothing by neglecting it.

The venereal pustule, if presented to us sufficiently early, and conveniently situated, should be removed by the knife or scissors, or should the fears of the patient prevent this, it is to be opened with the point of a lancet, and the whole internal surface well cauterized, and afterwards treated in the manner we shall direct for the management of the primary venereal ulcer.

When we are called upon to treat the simple primary venereal sore during its first stage, or that of ulceration, our first object is to destroy the diseased surface and reduce it to the condition of a simple sore. This is to be accomplished by means of an appropriate escharotic, with which the whole surface of the sore is to be well cauterized, taking care to avoid any parts of the sore, if such there be, where the process of granulation has already commenced.

It is during the ulcerating stage of primary syphilis, or when the process of granulation has only partially commenced, that our assistance is for the most part sought; and when the disease is in this stage there is no doubt of the propriety or practical utility of immediately applying an escharotic in such a manner as to destroy the diseased surface. Should any of the ulcerated surface have entered on the stage of granulation, that portion is to be avoided, and the application of the caustic confined, as much as possible, to such parts of the sore as are still in the stage of ulceration.

Whilst the chancre continues in the state of ulceration, the application must be repeated, waiting for the separation of the eschar produced by the caustic, to ascertain clearly the condition of the sore before we reapply the caustic. After the application, the ulcer should be covered with a piece of fine soft lint, spread with some simple ointment,[1] over which may be placed a bread poultice, or

[1] One of the best applications as an ointment at this period is the opiate cerate of the French Codex:—

fine linen moistened in the liquor plumbi diacetatis dilutis, and the whole covered with a piece of oiled silk or isinglass plaster.

The local dressings to chancres, employed by M. Ricord at this period, deserve particular notice. They consist in the application of aromatic wine,[1] medicated either with tannin,[2] with opium,[3] or with both.

The sores are to be carefully washed with one or other of these preparations, and afterwards covered with soft lint, moistened in them. Care must be taken, in renewing the dressings, to soften the lint well before it is removed, so that no part of the surface or surrounding skin may be torn away with the lint.

These preparations possess the advantages of modifying the surface of the sore, of promoting its rapid cicatrization, of diminishing the secretion of pus from its surface, and, by their astringent properties acting upon the surrounding tissues, of preventing the extension of the disease, or the formation of fresh chancres, a circumstance common in other modes of dressing. The use of the aromatic wine with or without tannin is contra-indicated when the surface of the sore is dry, furnishing no secretion and remaining indolent, or again where the edges being indurated these dressings seem to increase the induration.

Local applications to primary sores are of infinite importance. During the ulcerating stage aqueous solutions of opium, or weak solutions of sulphate of zinc, copper, nitrate of silver, &c., are the proper remedies. Sometimes even all these disagree, and produce pain, and dispose the ulcer to become sensible, and increase its secretion. At such periods frequent ablutions with cold water, and a dressing of soft lint or charpel, will often suit better than any

℞. Adipis, ℔j;
Vini opii, ʒj. M.

A strong aqueous solution of opium may be used where ointments are objected to, more particularly if the patient suffer much pain.

℞. Decoct. papaveris, v. conii, ʒviij;
Ext. opii purificati, gr. viij. M.

[1] The aromatic wine of the French Codex is composed of four ounces of aromatic herbs, (rosemary, rue, sage, hyssop, lavender, absinthium, origanum, thyme, laurel leaves, the flower of the red rose, chamomile, mellilotum, and elder,) digested in two pints of red wine for eight days.

[2] ℞. Vini aromatici, ʒviij;
Tannin, ℈ij. M.

[3] ℞. Vini aromatici, ʒviij;
Tannin, ℈ij;
Ext. opii pur., ʒss. M.

thing else. Topical mercurial applications, either in the shape of black wash, yellow wash, or ointment, should not, as a general principle, be used till the sore has become indolent, or disposed to heal.

The state of the economy at large demands much attention on the first appearance of a venereal ulcer; and we must here bear in mind the golden rule, that the varied appearances of primary venereal sores, and the characters they afterwards assume, depend very much, if not altogether, upon the natural constitution of the patient, and upon the particular condition of his health at the time he imbibes the venereal poison. Thus, in many instances, a primary venereal sore upon the penis produces the most intense local inflammation and fever. Under these circumstances the patient must be treated upon general principles: he should be restricted to the simplest diet, and kept quiet in bed, whilst emollient fomentations or poultices are applied to the sore. The local inflammation and fever are first to be removed, in these cases, before we think of resorting to escharotics; and should the stage of ulceration be arrested by these means, and the sore assume a disposition to heal, it will not be necessary, or even safe, to use them at all, but the granulating ulcer must be treated in the way we shall presently mention.

Cullerier, in the treatment of the primary venereal sore, confines his patients to bed and keeps them upon low diet; if there be any local inflammation or fever, he bleeds them from the arm, and covers the sore with a poultice, the opiate cerate, or a strong aqueous solution of opium. All local inflammation and accompanying fever are to be subdued before the use of the caustic; and, during the two or three days which are generally spent in its application, the patient should live low, keep his bed if possible, and take daily aperients, unless specially contra-indicated. This plan has the twofold object of preventing or mitigating the inflammation which may be caused by the application of the caustic, and preparing the patient for any subsequent general or local treatment the nature of the sore may require.[1]

During the earlier periods of the local treatment of chancre, a

[1] During those two or three days which are generally spent in the application of the caustic, the patient should be prepared by a purgative, and by regularity in his mode of living, for subsequent constitutional treatment; the lotio plumbi subacetatis may be applied without disturbing the dressing, by immersing the diseased part in it two or three times a day, or by rolling the penis in lint kept wet with this lotion, and covered with oiled silk. (Wallace; op. cit., pp. 97–8.)

regimen suited to the constitution of the patient should be observed. Under this point of view no exact rules are to be laid down. In some cases a purely antiphlogistic treatment becomes necessary, whilst in others, tonics and a nourishing diet are required. The state of the general health requires particular attention, for it must be recollected that, from a bad constitution, or one enfeebled by previously existing disease, result those complications and severe local affections, so frequently observed during the progress of primary venereal sores.

The more mildly primary ulcers are treated locally, the less likely are they to be followed by those appalling complications which sometimes accompany them, such as rapid ulceration, sloughing, or disorganization of the penis and scrotum, which used to be so common under the old treatment of stimulating mercurial applications during the first days of chancres. I dwell upon this point because I deem it of the first importance, whilst we have the universal testimony of modern writers on syphilis in its favour. To well understand the principles on which the local as well as the general treatment of primary sores must be conducted, the surgeon must constantly bear in mind the two stages of chancre: in the first we have to do with a specific sore, irritable, poisoned, and poisonous, liable to be irritated by the least stimulus; whilst in the second, we have a simple ulcer destitute of all these characters.

A chancre, when first presented to the notice of the surgeon, is generally in one of two states, either in that of a small pustule with its contents yet undischarged, or a minute ulcer. In whatever state it may be, our first duty is to endeavour, by the use of escharotics, to convert the specific sore into a simple one. For this purpose most authors recommend either a strong solution of the nitrate of silver, or the application of this caustic in substance.

When the nitrate of silver is used, if the disease be pustular, it will be necessary to open the pustule with the point of a lancet, to discharge its contents, and rub the whole surface and edges of the ulcer thus produced with the nitrate of silver previously cut to a sharp point; if the disease be an open ulcer it is to be treated in the same way. The nitrate of silver thus applied will sometimes have the effect of producing a simple sore, but it will more commonly give rise to considerable irritation and inflammation, whilst the specific character of the sore is not destroyed. I have seen so much evil, in this respect, from the use of this escharotic, that I have now abandoned its use under such circumstances, and have recourse to other caustics of a more powerful character.

The great evil in the use of the nitrate of silver in these cases is, that it is powerful enough to irritate, but not sufficiently powerful to destroy. We want a remedy that will at once disorganize the tissue to a depth co-equal with that of the chancre. For this purpose I now employ several remedies: highly concentrated nitric acid, the acid nitrate of mercury, the acid nitrate of silver, or the potassa cum calce of the London Pharmacopœia. I have already given a form for the preparation of the second of these remedies; the third is made by dissolving a drachm of the nitrate of silver in an ounce of nitric acid. When it is determined to destroy a primary venereal ulcer with any of the first three caustics, a camel-hair pencil must be dipped in them, and the surface and edges of the sore pencilled thickly over; if the acid be sufficiently concentrated, the whole surfaces touched are at once destroyed, and converted into a yellow eschar, which, on separating, generally leaves a clean simple sore underneath.

When the potassa cum calce is employed, which is the most certain of all the remedies I have mentioned, it must be made into a paste of moderate consistency with spirits of wine, at the time it is wanted for use, and the sore and its edges covered with it. When it has been on a few seconds, a smart burning pain is felt, which continues to increase as long as the caustic is suffered to remain on, which it should be from half a minute to a minute, or even longer, according to the effects produced. After this the caustic must be all removed by means of a fine bone spatula, and the black eschar left may be covered with a poultice, a cold saturnine lotion, or fine, soft, dry lint. The pain soon subsides after the caustic has been removed, and in about half an hour the patient is generally pretty comfortable. The aggregate amount of pain produced by the application of this remedy is not so great as that by the nitrate of silver, whilst the effect of the potassa cum calce is certain; all the parts touched by it are at once destroyed, and, on the separation of the eschar, we have a clean granulating sore left, which commonly yields with great rapidity, particularly if the ulcer be a recent one.

Whenever, then, a primary venereal sore is presented to us, unless there be some special contra-indication in its situation, &c., it should be immediately destroyed after the manner laid down. If the sore be recent, *i. e.*, of few days' standing, it is very probable we may eradicate the disease at once; the constitution may not as yet have become infected. In other instances it will become a

matter of consideration whether any constitutional treatment, and what kind, should be adopted during the healing of the sore produced by the caustic. A poultice is the most convenient and best application during the time the eschar is separating, if the patient can rest, which should always be urged upon him as an essential point, if it can possibly be managed. The moment the eschar begins to be detached, and a secreting surface is exposed, the poultice must be done away with and other remedies employed. Of these, weak lotions are the best. I employ weak solutions of the nitrate of silver, acetate or sulphate of copper, alum, or zinc, or tannin in port wine, in the proportion of about two drachms of the former to six ounces of the latter.

There are certain conditions of primary venereal ulcers which contra-indicate the use of the caustic in the first instance. If an ulcer of this kind produce violent inflammation of the penis, this must be reduced by a proper general treatment before we have recourse to these remedies, which may be used after the inflammation has been subdued, if the sore be foul and stationary, and show no disposition to heal. The situation of a primary venereal sore frequently altogether prevents the use of the remedies in question; for instance, chancre situated under the prepuce, and producing complete or partial phymosis. In such cases there is generally more or less inflammation or tumefaction of the penis, more or less discharge from the preputial opening, and a distinct hardness can be felt, tender to the touch. This hardness may be lesser or greater according to the size of the concealed sore; I have felt it extending from the prepuce, under the skin of the penis, down nearly to the pubes. It is almost useless, in such cases as these, to attempt the reduction of the inflammation of the penis by the ordinary means, which would succeed, were the surface of the sore exposed and not so situated. It must be borne in mind that the situation of the sore produces and keeps up the inflammation, and the phymosis which is dependent upon it. If the inflammatory symptoms in such a case run very high, general bleeding, aperients, rest, fomentations, and low diet, may be employed as preliminary measures, and we may succeed in subduing the inflammation more or less completely by these means. We must not, however, conceive that we have completely succeeded, unless we can reduce the phymosis, and expose the sore to view, the grand object towards which all our treatment should be directed.

These measures, then, in chancre, with inflammation of the penis

and phymosis, may, and perhaps must be, resorted to in the first instance; but if, after a reasonable time spent in their employ, the inflammation and tumefaction of the penis do not give way, and we cannot denude the glans, recourse must be had to the operation for the relief of the phymosis, and the surface of the sore then exposed must be instantly pencilled over with one of the liquid caustics before recommended. By these means we shall prevent the inoculation of the recently-cut surfaces. The parts should then be covered with pledgets of lint soaked in an appropriate lotion, and the whole enveloped in a poultice.

All primary venereal ulcers are attended, in the commencement, with more or less local inflammation, sometimes of so violent a character as to produce pretty smart symptomatic fever. Indeed, some of the most appalling results we witness, under circumstances of this kind, arise from the excess of local inflammation and the sloughing, rapid ulceration, or gangrene, which is its result.

I am convinced, from a very extensive experience in the treatment of syphilitic diseases, that many of the ill effects produced by primary sores are attributable to the want of a proper regimen on the part of the patient, and, perhaps, also to a want of sufficient directions on this point on the part of the surgeon.

Whenever we are consulted by a patient with a primary venereal ulcer, particularly if it is the first from which he has ever suffered, it will become necessary to point out to him in as strong terms as possible, the necessity of his adhering rigidly to a very abstemious diet till the ulcer assumes a granulating condition; it is well, also, at this period, to administer repeatedly, for some few days, aperient medicine, and to insist on a total abstinence from malt liquor, wine, or spirits. If the patient, from circumstances, cannot lie by and rest altogether, press upon him the advantage of retiring early to bed, rest in bed being a most important auxiliary in the treatment of all forms of primary syphilis. It is very easy to regulate all these matters in the hospital; but in private practice, to which I am now more particularly referring, such means cannot always be adopted; and I am afraid their extreme importance and advantage are not always stated in as strong a manner as they should be to the patient.

Whether it be the intention to submit the patient ultimately to mercurial treatment or not, these preliminary cautions should never be omitted. Many of the evils attendant on mercurial causes are to be attributed to not preparing the patient by diet, rest, and

aperients, for the administration of this medicine. I do not subscribe entirely to the tenets of those who treat syphilis systematically on what is termed the rational or simple plan without mercury; but I must bear so far testimony in favour of this school to say, that they have conferred an immense advantage upon society by pointing out that diet, rest, simple dressings, and an antiphlogistic regimen, have a vast influence over the ravages produced by syphilis; and wherever mercury is exhibited for the cure of syphilis, more particularly its primary forms, let the concomitant measures relative to diet and regimen be those which the rational school teaches, and I have just laid down.

If mercury be given for the cure of a primary venereal ulcer, it should not be used till the patient has been prepared to receive it by adopting, for some days, the regimen laid down, and till all inflammation produced by the action of the escharotics has subsided; it may then be employed with every hope of realizing its most beneficial effects. To throw it carelessly in without these precautions, under a vague impression that mercury is a specific for syphilis, is worse than injudicious; it is criminal, and cannot be too much censured.

Having arrested the progress of ulceration in the primary venereal ulcer, and brought it to the condition of a granulating sore, a change in the plan of treatment becomes necessary, both constitutionally and locally. If mercury be used, now is the time to have recourse to its employ with the hope of realizing its most beneficial effects.[1] I refer the reader to the section on the "Mercurial Treatment of Syphilitic Diseases," for rules to regulate him in the exhibition of mercury, and to the section on "Particular Preparations of Mercury," &c. for forms for its employment.

[1] The reader may consult, if he thinks proper, the works of Wallace, Ricord, Desruelles, and Cullerier, on the points here in question. He will find all admitting the superior efficacy of mercury in hastening the cicatrization of a primary venereal ulcer. The last three—partisans of the simple treatment—recommend mercury when the sore is indolent, does not cicatrize under the simple plan, when its edges are hard and elevated, or the sore leaves behind it, in healing, an indurated cicatrix.

Mercury, although not a specific against syphilis, is the most powerful therapeutic agent we can employ, in many cases, in its cure. (Ricord.) I am far from rejecting the internal use of mercury in the treatment of the primary venereal ulcer. I believe that in many cases it is necessary, and even indispensable. (See Cullerier; op. cit., p. 186; and the remarks of Desruelles; op. cit., pp. 313–15.)

Lugol believes that the simple or rational treatment of syphilis without mercury favours the development of scrofula in a future generation. (See his work translated by Dr. Ranking.)

The local treatment of the sore must also be changed when the granulating process has commenced; and as mercurial applications are generally injurious during the ulcerating stage of chancre, so are they beneficial during the stage of reparation. Local applications during this stage may consist of calomel and lime-water, mercurial ointment, the ung. hydrargyri nitratis, or the bichloride in lime-water; these applications being enumerated in the order of their stimulating properties. The aromatic wine, with or without tannin, will be useful, if the sore secrete much pus; if the surface of the sore be dry and foul, great benefit will be found by alternating the dressings with the wine, and some detergent ointment.[1]

The local applications must be varied to suit the actual condition and aspect of the sore: hence, should it be painful, opium combined with the remedy we apply is useful.[2] Should the irritability of the ulcers be of the inflammatory kind, it will be necessary to leave off all stimulating dressings, and have recourse to emollient fomentations, and the simple or opiate cerate. Cullerier employs as topical applications, when the inflammatory symptoms have subsided, solutions of the nitrate of silver, sulphate of copper, mercurial ointment, or pomades of calomel and opium, or mercurial ointment and opium.[3] All these varied preparations may be found useful in various conditions of the surface of the primary venereal ulcer. The condition of the latter is the only circumstance that can guide us in their proper mode of application.

Dr. Wallace thinks topical mercurial preparations of great value in the treatment of primary venereal sores, in the second stage, and believes that, in some measure, they supersede the necessity of an internal mercurial treatment. "In dispensary practice, and among the lower ranks of society, the internal administration of mercury, particularly at inclement seasons of the year, can seldom with safety be recommended. In such persons, and under such circumstances, topical applications are of infinite value. In cases of this kind I generally confine my treatment to them, in conjunc-

[1] ℞. Resinæ flavæ,
Gum. elemi,
Ceræ flavæ, āā ʒj;
Ol. olivæ, ʒvj;
Olei terebinth., ʒij. M. ft. unguent.

[2] ℞. Cerat. opiat., ʒj;
Hyd. chlorid., ℈ij. M.

[3] ℞. Cerat. opiat.,
Ung. hyd. fort., āā ʒj. M.

tion with the internal use of nitrous acid, and, by these means, succeed for the most part in healing the disease with rapidity. Cases treated in this way are also very rarely followed by secondary symptoms.[1]

The indurated primary ulcer demands a treatment, both local and general, in some measure different from the ordinary forms of disease. Its destruction by caustic must not be attempted. This requires a mercurial course till the sore has healed without induration of the cicatrix. It must be recollected I limit the expression "indurated" to an ulcer that is so from the commencement of the disease, and do not apply it to those sores which have become indurated from the repeated application of stimulating dressings. Local treatment is not generally so efficacious in ameliorating the condition of this as the other varieties of primary syphilis; the sore is not commonly much benefited except through the medium of the constitution. Dr. Wallace gives some good diagnostic marks by which we are enabled to distinguish between the induration which is the natural attendant upon this species of ulcer, and that which is produced in ordinary simple sores by the injudicious application of remedies: "We may always distinguish by the history of the case and by the character of the areola, the indurated ulcerations which are connected with irritation or inflammation. Thus, if indurated primary syphilis be not attended by these morbid states, it will not be surrounded by an inflamed, but by a callous or livid white areola, with or without a whitish line at the very edge or margin of the ulcerated surface; or else the skin surrounding the ulcer will present its natural appearance." (Pp. 310-11.)

I never now adopt the ordinary mercurial treatment in the specific indurated ulcer. I rarely give blue pill, or calomel and opium, or use frictions with mercurial ointment; the evils of these treatments I have pointed out in the sections on the "mercurial treatment" of syphilis. I confine my patient to a milk or broth diet, submit him to the action of the mercurial vapour-bath daily, and give him the biniodide or bichloride of mercury in solution, in doses not exceeding from the 20th to the 12th of a grain. I continue this plan till the gums are red, elevated, and spongy; the vapour may then be administered every two or every three days till the sore has healed and the induration gone. Two or three days'

[1] Wallace, p. 113.

treatment generally makes a marked impression on the disease, even before the constitutional effects of it are ascertainable. I will venture to affirm, that this is by far the most certain method of preventing constitutional taint from an indurated primary sore, and it has the vast advantages of being free from the evils of a mercurial course, as commonly conducted.

There is a symptom succeeding to primary ulcers which sometimes occasions considerable anxiety to the patient and annoyance to his surgeon; this is, "induration of the cicatrix." After the healing of a primary sore the cicatrix occasionally remains hard and elevated, and is prone to ulcerate on the occurrence of the slightest exciting causes. This local condition denotes the persistence of syphilitic action on the system, and is the "forerunner of accidents to come." A patient in this condition may daily look for secondary local ulcerations of a rapid and destructive character, and constitutional symptoms of the most formidable kind. It, therefore, behooves him to adopt speedy means for the removal of the induration, which may be generally accomplished, and till that period arrives he cannot be considered safe.

I could detail a number of cases of induration of this character which I have entirely succeeded in removing by the following treatment. The patient should have his diet regulated, and be prepared for the use of the mercurial vapour-bath, which should be employed three times a week; at the same time, he should take the biniodide of mercury in solution with the hydriodate of potass,[1] till the mouth becomes sore, which should be kept so till the induration is gone. Few recent indurations will resist a perseverance in this plan of treatment. If perfectly chronic, and of long standing, the case may be more obstinate.

[1] ℞. Hyd. biniodidi, gr. iij;
Potass. iodidi, ʒij;
Syr. aurantii, ʒss;
Aquæ cinnamomi, ʒiss. M.
Cap. guttas xv—xxx ter. die.

CHAPTER IX.

OF CHANCRES OF THE URETHRA.

CASES of syphilitic ulcers in the urethra have been cursorily alluded to by many surgical writers. Hunter mentioned them, but certainly had no clear idea of their true character and effects; they are also noticed by Mr. R. Carmichael in his clinical lectures on Venereal Diseases. The late Dr. Wallace spoke of some discharges from the urethra of venereal origin, which were only curable by mercury, but it has been left to modern surgical pathologists to demonstrate that primary venereal sores, precisely resembling in their nature and consequences sores situated externally, may exist in the canal of the urethra itself, at variable points between the meatus urinarius and the bladder.

It is clear, both from the statement of English and French writers, that discharges from the urethra are due to more causes than one; and hence it is that we find Dr. Wallace saying, "that there occur cases of these discharges, in which we find mercury to act in the most salutary manner; and others again, in which the discharge will continue, and be, after a time, followed by induration and bubo, and, most probably, by secondary symptoms, unless this medicine be given."[1] When we consider the generally powerless effect of mercury over pure gonorrhœa, we cannot but suppose that these remarks of Dr. Wallace must refer to chancres or venereal ulcerations of the urethra, which an imperfect diagnosis has confounded with gonorrhœa.

These are heat, itching, or irritation in the urethra, occurring after a suspicious connexion, unaccompanied by discharge; pain or tenderness in a particular part of the urethra when it is rolled between the fingers; the presence of a distinct induration at the point where the pain is complained of; pain also increased during micturition, and referred to the same point. Discharge from the urethra occurs at various and at irregular periods after the setting in

[1] Op. cit., pp. 248–9.

of the first symptoms already described. It is very different from the discharge of gonorrhœa; it may be sanious, bloody, or of a sloughy character, and commonly does not flow unless the indurated portion before described be pressed forcibly between the fingers.

A gentleman consulted me for a disease in the urethra, which had existed many months, and which he said consisted at first in a small sore, visible when the lips of the meatus were separated. This part had healed; but it was evident that the ulcer had extended its ravages down the urethra, since, on pressing an induration which existed behind the glans between the fingers, there escaped from the urethra a tenacious slough, precisely resembling that covering an indurated or Hunterian chancre in its first or ulcerating stage.

The only disease for which chancre of the urethra can be mistaken is gonorrhœa. From this it is to be distinguished by the history of the case, the character and quantity of the discharge, the presence of a distinct circumscribed induration in some part of the urethra, most commonly seated in or immediately behind the glans penis. This circumscribed induration must not be mistaken for that general induration of the corpus spongiosum urethræ which accompanies acute gonorrhœa, and results from an effusion of lymph, &c. into the cells of the spongy body. This state in gonorrhœa is generally accompanied by chordee, a symptom absent in chancre of the urethra.

In cases where muco-purulent discharges from the urethra continue to resist the usual methods of treatment we may resort to the means of differential diagnosis, of testing the character of the disease by inoculation. It[1] has been established that the inoculation of the skin of the thigh, the prepuce, or elsewhere, with the matter of pure gonorrhœa produces no result, or at best a negative one. The same inoculation with matter from the urethra, secreted by a chancre in that part, gives a characteristic pustule, and subsequently a chancre or sore of venereal aspect. In eighty-five cases of urethral discharges, thus tested by M. Mairion, at the military hospital of Louvain, four were found of true syphilitic character, and produced chancres by inoculation; the remaining eighty-one gave no result; they were cases of simple gonorrhœa.

[1] See the chapter on "Inoculation," and the cases of "chancres larvés," in Ricord's work, before referred to.

In some rare cases I believe it possible that a primary venereal sore in the urethra and gonorrhœa may be contracted by the same connexion. I will mention a case which seems to bear upon this point. A gentleman, fifty years of age, contracted from a suspicious connexion a discharge from the urethra, which had all the characters of ordinary gonorrhœa; he placed himself under the care of an eminent practitioner, and took for a month the ordinary remedies, such as copaiba and cubebs: with this treatment the discharge disappeared. At this time a slight ulceration was perceptible round the meatus, which seemed to come from within the urethra. This spread rapidly, soon involving the whole under surface of the glans, and the urethra for an inch and a half, which were entirely destroyed by ulceration and sloughing. I was consulted on this case, which was succeeded by extensive nodes, and a pustular eruption; and what is very remarkable, the nodes were the first constitutional symptoms which occurred, an exception to the law which seems to regulate the appearance of constitutional symptoms generally.

I believe the poisons of gonorrhœa and syphilis to be perfectly distinct, but yet there are cases occasionally presented to our notice where both chancres and gonorrhœa exist at the same time.

It is not uncommon to see patients with external sores and a true gonorrhœal discharge from the urethra at the same time; neither, in the female, is it rare to see true primary venereal sores in the vulva, vagina, or uterus, coexisting with purulent discharge from the os uteri or urethra. In the male, however, more particularly, these two primary forms of disease are not curable by the same remedies. In the case I have just quoted, it appeared that the two forms of primary venereal infection existed simultaneously in the urethra at the commencement, since the symptoms of gonorrhœa disappeared under the use of the ordinary specific remedies; whilst the venereal ulcers continued to spread, and ultimately produced the most serious mutilation. We have no further proof of the opinion I have hazarded than is to be drawn from the effect of remedies, a fact to which I am disposed to attach very considerable importance.

Chancres in the urethra may be met with as a solitary form of primary venereal infection, or they may coexist with sores situated externally. The case of M'Knight, subsequently recorded, is a proof of this. It very commonly happens, also, that the presence of external sores, and the absence of discharge from the urethra, prevent any examination of the latter. In examining, however,

a patient who applies with a primary venereal affection, the canal of the urethra should always be pressed between the fingers, and the lips of the meatus opened.

A gentleman contracted several small sores situated on the glans and prepuce; they were free from pain and irritation, and healed quickly under ordinary treatment; the glans, however, became swollen, red, and shining, and yet there was no external symptom to account for it. In everting the lips of the meatus a small sore was discovered, upon which the condition of the glans was evidently dependent, since it disappeared as soon as the sore in the urethra healed.

The prognosis of chancres in the urethra is not always favourable; Ricord and Vidal de Cassis have shown that by extension to the bladder they may terminate fatally. The prognosis is again unfavourable as regards the integrity of the organs of generation, since, however carefully they may be watched, severe mutilations are occasionally produced. The chief evils I have seen arise from chancres in the urethra have been the following:

1st. Contraction of the orifice of the urethra by the cicatrix of the chancre. I attended a gentleman who had a chancre of the orifice of the urethra, which, in healing, so contracted the meatus orifice, that it would not admit the bulbous extremity of an ordinary silver probe.

2d. Contraction of the urethra by the cicatrix of the chancre where the sore has been situated lower down. To this species of stricture the term traumatic has been applied. It does not readily yield to the bougie.

3d. Perforations of the urethra. These are variable in extent and situation, but are commonly situated immediately behind the glans. I have said that a very common seat of chancre of the urethra is the fossa navicularis, and the glans is sometimes scooped out as it were by the spreading out of venereal ulceration in this situation. I have seen this passage behind the glans opened for an extent of an inch and a half by the ravages of a urethral chancre.

4th. The urethra itself may be completely destroyed to a greater or less extent. Of this also I have seen one example, where the passage was destroyed by ulceration for two inches, and the urethra opened on the under surface of the body of the penis.

I can conceive of nothing more horrible to a young man than mutilation of this character, which, in spite of all our care and attention, will sometimes take place, if the disease assume a phagedænic form, and spread by rapid ulceration or sloughing. They

are not, however, so likely to happen if the disease has been at once diagnosticated and properly treated from the commencement.

Constitutional symptoms are just as likely to occur in consequence of primary venereal diseases in the urethra, as when such sores are situated externally.

The question next arises, how are primary venereal sores situated within the urethra to be treated? The situation of these sores precludes the adoption of the practice I have recommended to be employed in primary venereal sores situated elsewhere.

The use of caustics is clearly impossible, unless the sore be situated immediately within the urethra, and even then their application will require great care and attention, and is not generally to be recommended.

From the situation of a primary venereal sore in the urethra we are prevented employing the local remedies commonly used in the treatment of chancre; and an indiscriminate course of mercury is still more useless and injurious.

The existence of chancre of the urethra being ascertained, the inflammatory symptoms are to be first subdued by a treatment appropriate to the earlier stages of gonorrhœa; diet, rest, diluents, and cathartic medicines, with emollient injections. Afterwards we may resort to injections with aromatic wine, or solutions of the nitrate of silver, or the solid nitrate may be introduced, and the surface of the sores cauterized, if the inflammatory symptoms are too acute, and the chancre situated within reach. It is useful to introduce a small plug of lint into the urethra, impregnated with the injection we employ, with the view of keeping the surface apart, and preventing any extension of the disease.

Mercury may be employed, in chancres of the urethra, at the period, and in the manner before recommended in the treatment of indurated primary venereal sores, attending to the local aspect of the sore during its administration.

A man entered the venereal hospital, said to have suffered from gonorrhœa for twelve months, in the treatment of which copaiba, cubebs, and various astringents had been vainly employed by a variety of surgeons. The discharge, from the patient's account, had never been very profuse; on pressing the urethra firmly there hardly issued some drops of pus. The glans was considerably swollen, and its summit the seat of an induration the size of a nut, surrounding the meatus. On separating the lips of the orifice a large chancre was discovered, which had burrowed itself deeply

into the parietes of the canal. This patient had been submitted to several mercurial courses without benefit, because (says M. Cullerier) the local treatment of the sore had been neglected. All internal treatment was now suspended; a strict dietetic regimen and repose were directed to be observed, and leeches were applied from time to time. In the intervals, a piece of lint, covered with opiate cerate, was kept in the urethra; emollient fomentations were frequently used, and the penis enveloped in a poultice. Under the influence of these remedies the inflammation soon disappeared, the sore became clean, and a few applications of the nitrate of silver were sufficient to effect a cure.

Case XI.

Robert M'Knight, by trade a Scotch hawker, aged 29, contracted, from the same connexion, sores on the penis and a running from the urethra, seven years ago. The ulcers on the penis were cured, very likely by a mercurial course, as M'Knight has been repeatedly salivated. The treatment which cured the external sores had no effect upon the discharge from the urethra; this continued: it has been repeatedly treated, but never cured. Soon after this, scaly blotches appeared on the forehead and other parts of the body, which disappeared under medical treatment. Disregarding the discharge from the urethra, which never disappeared, and fancying himself well, our patient now married. His first child died a few months after birth, covered with blotches: a second and a third child shared the same fate, and died under the same circumstances. The wife also had sores and bloody discharge from the vagina, and blotches on the body, the husband still having no affection except the slight running from the urethra, which sometimes attracted his attention, and at others was totally disregarded.

During these periods M'Knight had, at several times, fresh constitutional symptoms, for which he underwent a variety of treatment, but was never free from the running from the urethra. In November, 1843, between six and seven years after M'Knight contracted his primary disease, he came under my care as a patient of the Queen's hospital. He was then in the following state: The head and face were covered with foul blotches, which consisted of incrustations or scabs, concealing deep, irregular, and ill-conditioned ulcers; there was superficial redness of the fauces, but no ulceration at this time; he was feeble and emaciated from long-

continued disease. The skin disease was evidently pustular in its commencement, as one or two fresh-formed pustules were on the face: these pustules were situated on an inflamed base, and, when they broke and discharged, ran into ulcers, covered with flat or conical crusts, thus constituting a variety of disease to which the term "pustulo-crustaceous" has been applied.

He denied at first having any thing the matter with the genitals, but, on closer questioning, admitted that he had a running so slight as to be hardly worthy of notice. On examination I perceived a sanious oozing from the urethra, very different from that which characterizes chronic gonorrhœa or gleet. About an inch from the meatus, immediately behind the glans penis, existed a circumscribed induration, about the size of a hazel nut: this was painful when pressed between the fingers, and the pressure occasioned some blood and portions of white tenacious sloughs to issue from the urethra. On separating the lips of the meatus urinarius, by means of a small speculum made for the purpose, the commencement of ulceration, which appeared to extend deep into the urethra, could be perceived.

This case is remarkable under many points of view. In the first place the disease itself (primary venereal sore in the urethra) is not of every day occurrence, although I have seen many instances of it; again, the time which the sore has existed is remarkable. There is no evidence that M'Knight had ever contracted a venereal disease subsequent to his marriage; the evidence of the wife and himself is conclusive upon this point. The sores which M'Knight contracted at the same time he contracted the running were cured previous to his marriage, the running still remaining; some days he perceived none; yet having no other disease than that in the urethra, we observe the wife becoming diseased, and three children dying, with unquestionable venereal affections.

This case is one, then, of primary venereal sore in the urethra, contracted at the same time with external primary sores. The primary sores were healed, but the urethral sore remained uncured, and, marrying in this state, his offspring all die diseased, and his wife also is affected.

The patient has had repeated attacks of constitutional disease in the most alarming forms, which have recurred as often as they have been cured, and this I explain by the sore in the urethra being still open and poisoned, and thus forming, as it were, a well of poison, which was constantly tainting the system.

It is proved by the history of this case, then, which has been very carefully watched and examined, and the history very correctly taken, that primary venereal sores may exist within the urethra for a long period of time. M. Cullerier has recorded a case of this nature, which had, when presented to his notice, continued upwards of a year, and was then uncured, although the patient had been submitted to repeated treatments. These sores may be seated in any part of the urethra, and even in some rare cases extend to the bladder itself.

Case XII.

Thickening and contraction of the urethra, from the cicatrices of venereal sores situated in the fossa navicularis; chancre of the fossa navicularis.

A middle-aged gentleman came to consult me respecting what he termed an obstruction in his urethra; he gave the following history of his case:—About eighteen months ago (September, 1843,) shortly after a suspicious intercourse, he perceived a slight discharge from the orifice of the urethra, from which there issued some drops of pus; on separating the lips of the urethra he perceived within them a small sore. He applied to a druggist, who furnished him with an ointment which irritated the sore and made it worse. Some time after this, a surgeon was consulted, who recommended mercury; this was taken till salivation was produced. The sore, however, did not amend under its use; it was still to be perceived when the urethra was examined, and the same discharge of drops of pus continued.

He consulted, some time after this, a second surgeon, who cauterized the sore daily with the nitrate of silver; this produced hardness of the glans penis, and discharge of sloughs and blood from the urethra. This state of things continuing, the patient began to lose confidence in the mode of treatment, which he abandoned, and, three weeks after the last application of the caustic, he consulted me. Copper-coloured spots made their appearance on several parts of the body, the arms, and trunk, at this time.

When the patient pressed the urethra forcibly between the fingers, he brought from it a thick tenacious slough, exactly resembling that which covers an indurated chancre in its first or ulcerating stage. The under surface of the glans penis was red and inflamed, and, when this part was examined between the fingers, a considerable induration was perceived, which appeared to exist in the lower part of the fossa navicularis, just within the urethra.

When this induration was pressed, there issued from the urethra pus, sometimes mixed with blood, and at times tenacious shreds or portions of sloughs similar to those already spoken of. I examined the interior of the urethra for an inch and a half or more, with a small speculum made for the purpose. A white smooth cicatrix occupied the whole of the fossa navicularis on its upper part and sides; I could not obtain a clear view of the bottom of the fossa, where I believe ulceration still existed. This I inferred from the induration, the redness opposite this part, and the character of the discharge forced from the urethra when the induration was pressed between the fingers.

There were no constitutional symptoms in existence either in the throat or vicinity of the anus, some copper-coloured blotches only occupied the arms and legs. In primary venereal sores of the urethra, the local treatment is a main point to be attended to. I recommended the patient to inject the urethra three times a day with tepid olive oil, and in the intervals introduced into the passage a thin shred of soft lint soaked in a solution of tannin and extract of opium.[1] The lint was kept constantly in the urethra, merely being removed when the patient wished to make water. The patient was also directed to take one grain of the iodide of mercury with three of the extract of conium, in a pill, every night, and to be strictly regular in his mode of life. With very slight modification in the mode of treatment at first laid down, this case was brought in a few weeks to a successful issue, the induration and discharge disappeared from the urethra, and the copper-coloured blotches from the body. There remained merely some contraction of the urethra, produced by the first cicatrix, which was materially relieved by the bougie. This constitutes what has been termed by some writers "traumatic stricture," very commonly produced by the cicatrices of primary venereal sores thus situated, which, when they do not actually contract the urethra, partially destroy its elasticity, and produce many troublesome symptoms, more particularly a dribbling away of the urine for some minutes after the patient has done making water. This constitutes a species of incontinence of urine whose cause is to be sought for, not in the bladder but in the urethra.

[1] ℞. Tannin, gr. x;
Ext. opii pur., gr. ij;
Aquæ, ℥j. M. ft. lotio.

CHAPTER X.

OF PHAGEDENA.

INSTEAD of following the regular course, the primary ulcer assumes a character of rapid ulceration or sloughing, to which the term phagedena is applied. Phagedenic ulcers assume various forms; sometimes they are intensely painful, the surface covered with a tenacious yellow slough, the edge red and hard, and the surrounding integuments little or not at all affected. This species of sore spreads rapidly by ulceration, and if not arrested frequently occasions fearful mutilation. Primary ulcers frequently assume this character at the commencement, without any evident cause, but it is again a secondary condition, produced by the habits or constitution of the patient, the injudicious exhibition of mercury, or improper local treatment. Primary ulcers assume a phagedenic appearance from an excess of local inflammation; in such cases the penis is lividly red, and much swollen, and the sore itself covered by an adherent dark parti-coloured or black slough. With these local conditions the constitution of the patient sympathizes more or less; there is, in some cases, smart symptomatic fever, the pain prevents sleep, and there are profuse night perspirations.

In many cases no positive cause can be assigned. I have seen phagedena in persons previously very healthy. Desruelles, in the true spirit of Broussaism, attributes it to irritation of the viscera, a chronic gastritis, or gastro-enteritis. Ricord believes, also, that there is commonly an accompanying visceral irritation, but believes, also, that a cold damp atmosphere disposes primary sores to become phagedenic. Mr. Mayo states that "what gives the phagedenic character to sores on the genitals after infection, is some peculiarity of the general habit." This is perhaps true, but the difficulty is to know in what this peculiarity consists.

I have seen primary phagedena on the body of the penis, on the lower part of the abdomen, in three instances in the male, and here I am fully persuaded that they were produced by secondary sores

in the female. This form of disease is particularly liable to occur at the orifice of the urethra; it commences in the fossa navicularis, the glans penis is red, shining, and swollen, a sanious discharge issues from the meatus, and a white ring soon surrounds it; the ulcerative process soon extends over the whole glans. Mutilation can hardly be prevented in such cases, for to however a trifling extent the substance of the glans may be destroyed by ulceration it is never repaired, the ulcers may cicatrize and heal, but the loss of substance is not restored. On everting the lips of the meatus in such cases, a white slough may be seen covering the whole surface brought into view. I have seen five cases of this kind.

The treatment of phagedena is local and constitutional. I have not much faith in the former. The first indication is clearly to arrest the process of ulceration, whether this be done by local or constitutional measures, by escharotics of various kinds locally, or by bleeding, tartar emetic, opium, or mercury, as constitutional remedies.

One of the most apparently feasible means of arresting the ulcerative process is destruction of the whole surface of the sore by strong nitric acid, or the acid nitrate of mercury, which is then to be covered with a poultice or pledgets of lint soaked in warm olive oil, or strong decoctions of poppy, or aqueous solution of opium. Although this may be practised in some forms of phagedena, there are others in which it is inadmissible or positively injurious. In sores characterized by great irritability caustics are hurtful, and in those marked by great inflammatory action, this must be subdued before the acid is used, but it may then be employed, if necessary. In these varieties of phagedena a purely antiphlogistic treatment, with anodyne fomentations or poultices, is the safest practice, leaving the application of caustics till the inflammatory action has been in some measure subdued. As local applications to very irritable ulcers of this kind I have found the Unguent. Zinci with opium answer very well where all other applications have failed.[1] Dr. Wallace recommends the unguentum hydrargyri with opium.[2] As a detergent for sloughy sores, or after the acid has been used, one of the best applications is composed of equal parts of balsam of Peru and castor oil.

[1] ℞. Unguent. zinci, ℥jss;
Pulv. opii, ʒij. M.

[2] ℞. Unguent. hydr. fort., ℥j;
Extr. opii pur., ʒj. M.

In those forms of primary phagedena attended by severe pain, our chief reliance is to be placed upon opium combined with tartar-emetic; conium, hyoscyamus, and other sedatives may be employed, but the most certain remedy is the first; with this may be combined sarsaparilla in conjunction with the iodide of potassium, or the mineral acids, or the cold infusion of sarsa in lime water, which is the best form.[1] In the inflammatory forms, general bleeding may be indicated, but, except in extreme cases, I do not approve of this practice. I prefer low diet and tartar emetic as a means of reducing inflammation in such cases. It must be remembered, also, that we have to deal with a specific and not a common inflammation, and as I have already remarked, when speaking of the inflammatory forms of gonorrhœa, that the inflammatory symptoms do not in all cases yield to antiphlogistic treatment, we debilitate the patient very often by them, and do not ameliorate the disease. In such cases mercury is sometimes of great use. There are cases, certainly, in which the degree of inflammatory action accompanying a primary syphilitic sore is not a positive contra-indication to the use of mercury. Dr. Wallace had already remarked this, and founds his opinion on the value of mercury freely exhibited in syphilitic iritis, and upon the fact that mercurial fumigations, in certain destructive sores of the throat, are very frequently beneficial, though attended by great inflammatory action. No remark can be more correct. The records of cases treated under my care in the Queen's Hospital, afford abundant evidence of this, and I think the following rule laid down by Dr. Wallace of extreme value, "that although that form of inflammation which supervenes when a patient is under a mercurial course, is sure to be aggravated by persisting in the use of mercury, the remedy will powerfully assist to subdue inflammation which commences under different circumstances."

In those forms of phagedena which are characterized by a black slough, the sloughing phagedena of British surgeons, the gangrenous phagedenic chancre of the French, mercury is wholly inadmissible, the disease is to be treated on the principles which should regulate us in the management of similar diseases not syphilitic. It must be recollected, however, when the sore has been brought to

[1] ℞. Rad. sarsæ, ʒiv;
Rad. glycorrhizæ, ʒj;
Liquoris calcis, Oij.
Macera per horas xxiv. Cap. poculum magnum ter die.

heal by proper remedies, that it has had a venereal origin, and perhaps has succeeded to a regular primary sore, rendered gangrenous by irregularities and bad treatment, and therefore that it may be followed by secondary or constitutional symptoms.

It will be evident from what has been said, that mercury is not to be generally employed in phagedena; although there are cases in which its use may be beneficial, and these are chiefly where all other ordinary means have failed in arresting the extension of ulceration; when it is indicated, the method par excellence is that by fumigation. The other remedies consist of venesection, and tartar emetic,[1] the dilute nitric acid, or the nitro-muriatic acid, or the hydriodate of potass with bark, or sarsaparilla. In the way of local treatment in certain cases, no applications are better than strong nitric acid, the acid nitrate, or the per-nitrate of mercury, "used freely to the sore, and repeated till a clean vascular surface comes into view." The first or second application is not attended with considerable pain, as the disorganized surface tends to protect the more sensitive parts underneath; but as the slough becomes detached, the pain is increased on each successive application. If the slough be reproduced, it may be dressed with equal parts of balsam of Peru and castor oil.[2]

Secondary venereal ulcers sometimes assume a phagedenic character. Secondary phagedena, however, is chiefly met with in the throat and fauces in bad constitutions, or constitutions broken down by bad living, long-continued disease, or improper treatment. To these we shall return, when speaking of secondary syphilis.

Case XIII.

Phagedena of the body of the penis, spreading by rapid ulceration; failure of ordinary treatment; cure by mercurial fumigation.

A young gentleman, of delicate constitution, aged 22, contracted a sore on the body of the penis. It appeared first as a pimple, but

[1] Carmichael's Antimonial Solution:

℞. Antim. tart., gr. iv;
Tinct. opii, ʒj;
Tinct. card. co., ʒss;
Syrup., ʒss;
Aquæ fontanæ, ʒvij. M.

Administered in the simple or compound decoction of sarsa, in primary venereal ulcers, where much inflammation is present; also in the earlier stages of all syphilitic eruptions.

[2] Egan; on Primary and Secondary Phagedena, "Dublin Journal," January, 1845.

rapidly ulcerated and spread. I saw this patient seventeen days after the first appearance of the ulcer. It was then as large as half-a-crown, covered with a tenacious yellow slough, the edges hard, elevated, and red, but no characteristic induration. The pain from the ulcer was most severe, its surface very sensitive; the patient could not sleep, and was tormented with profuse perspirations. Various local remedies were tried without effect, the irritability and sensitiveness of the sore were so great that I feared to use caustic to avert the spread of the ulceration, which increased daily. The only local remedy which could be borne was the unguentum zinci with powdered opium. For twelve or fourteen days I kept this patient in bed, and gave him large doses of conium with opium, sarsa with nitric acid, &c., with very little, or I may say no good effect. The ulceration continued to extend, and threatened to involve the whole integument of the penis. I now resorted to the moist mercurial fume. I placed him in a strong bath, in which he only remained ten minutes, the pain produced was so great, and when he was removed he fainted. On the next day the ulceration had not spread; the bath was again used, with less pain; on the third day there was no pain, and one or two healthy spots made their appearance in the centre of the slough which covered the sore, and the edges were less hard. After the fifth bath, the ulcer was covered with healthy granulations, and very shortly healed. The gums were very slightly affected.

Case XIV.

Indurated phagedenic ulcer of the glans penis; failure of ordinary treatment; cure by mercurial fumigation.

A commercial gentleman, very healthy, 28 years of age, contracted a sore on the under surface of the glans penis, near the frænum. I did not see it till the third week of its existence, during which period the patient had pursued his usual avocations, and used various local remedies. When I first saw this case there was a deep burrowing ulcer involving the whole under surface of the glans, having destroyed the frænum, and extended to the integument on the under surface of the penis; this ulcer was covered with a tenacious slough, black in some places, white in others. The glans penis itself was swollen and much inflamed, and the whole body of the penis was in a similar condition. The patient was now confined to bed, placed on a low diet, the parts enveloped in a bread poultice, and aperients, with nauseating doses of antimony

exhibited. In two or three days, the ulcer continuing to spread, I destroyed the whole surface with the acid nitrate of mercury, and after the separation of the eschar, no improvement having taken place, I did this a second time. The slough was again reproduced, the ulcer still spreading, and threatening to open the urethra; a circumstance I have seen more than once consequent upon ulcers in this situation. It is to be remarked also that the general inflammation in the glans and penis were very little reduced by the rest, diet, and antiphlogistic treatment. I now resorted to the mercurial fume. The patient was immersed daily for forty minutes; there was no extension of disease after the second bath. At the end of eighteen days the sore had healed without induration, leaving, however, an excavated cicatrix on the glans. The mouth was moderately sore. Profuse night perspiration also accompanied the ulcerating and sloughing stages.

CHAPTER XI.

OF VENEREAL ULCERS IN THE FEMALE.

PRIMARY venereal ulcers in the female are most commonly seated in the external parts, as the labia majora, the nymphæ, the folds of mucous membrane surrounding the clitoris, at the orifice or other parts of the vagina, or at the meatus urinarius.

True chancres, *i. e.*, primary indurated sores, yielding a characteristic pustule by inoculation, are rare on the neck or at the orifice of the womb, although ulcerations, unquestionably syphilitic, and which produce disease in the male, are exceedingly common in this situation. In reference to the first point, M. Ricord gives one case only (Case 13,) where, after inoculation, the characteristic pustule succeeded. Mr. Whitehead says (p. 367,) I have seen but one case of this kind, it had the genuine chancrous appearance, but yielded no result when inoculated. Dr. Bennet quotes two cases (on Inflammation of the Uterus, &c., pp. 441, 444,) which were most probably primary venereal sores, but no account is given of the results of inoculation, and probably they were not tested. Gibert (Traité des Maladies Vénériennes, chap. ii.) regarded many of the ulcerations of the os uteri, which had been confounded with syphilis, as purely inflammatory diseases, and this opinion has lately been reproduced by Dr. Bennet. Nevertheless, I am persuaded that many of the ulcerations which are found on the os and in the cervix uteri, in females who are suffering from secondary syphilis, are of a syphilitic character, whether primary or secondary I am not prepared to say. If primary, they differ in their appearance from chancres elsewhere, and I have never, in one single instance, been able to produce a characteristic pustule by inoculation, although a week has rarely passed without my making an experiment of this kind.

These ulcers, however, produce disease in the male, although not inoculable.

Case XV.

Secondary syphilis in the wife, suspicious ulcer of the os uteri; gonorrhœa, and superficial sores in the husband.

A. L—— was admitted as an out-patient of the Queen's Hospital, with gonorrhœa, and several superficial sores round the corona glandis. He said the disease had been communicated by his wife, who was suffering from secondary syphilis when he married her; and, soon after the disease under which he laboured broke out, he brought his wife with him for examination. A well-defined inflammatory patch surrounded the os uteri, on the lower lip of which existed a deep ulcer, the size of a sixpence, which appeared to run into the cervix. The anterior lip was much thickened; I never saw any sore more closely resemble a chancre; but it produced no result when inoculated. I must think with Mr. Whitehead, that the great majority of morbid conditions which are found on the lips, and at the orifice of the uterus in females who are labouring under a confirmed venereal taint, are of syphilitic character, probably they are secondary, or rather constitutional. It is rare to find the uterus free from disease where a confirmed constitutional taint exists; the os is either surrounded by a ring of inflammation, or the lips are everted and red, and more or less thickened; again, superficial ulcers exist, either having a granular appearance, or, what is less common, the edges of the ulcer well defined, and its edges elevated and hard. M. Gibert says, we must admit that this granular condition, or this ulceration of the os uteri, is due to syphilis, and belongs most commonly to secondary syphilis.

CHAPTER XII.

OF BUBO.[1]

BUBO may be primary, secondary, or constitutional, sympathetic or syphilitic, succeeding either to chancre, gonorrhœa, balanitis, or making its appearance without any of these diseases having preceded it. The true venereal bubo is most commonly preceded by a primary disease, and is hence secondary, but it may occur as a primary syphilitic symptom. Authors are divided as to the frequency of its occurrence under the latter form. I believe it to be very rare. It very commonly happens that the most formidable buboes succeed to affections so trivial that they have escaped the observation of the patient; and hence we may frequently, when called to treat buboes which are said not to have been preceded by any other syphilitic affection, discover, on drawing back the prepuce, a slight balanitis, or excoriation, or the fresh cicatrix of some trivial ulcer. The bubo, which has been termed primitive, or d'emblée, which arises after promiscuous intercourse, and has not been preceded by either a discharge from the urethra, a sore, excoriation, crack, or fissure, on the genital organs, may be, but commonly is not venereal.[2] It is very commonly due, in young persons especially, to over-sexual indulgence, or violent exercise during coition: of this I have seen many instances. This is clearly not a primitive virulent bubo, produced by the absorption of any special virus, but an ordinary adenitis due to an evident cause. I have never seen a case of primitive bubo, which has been tested by inoculation, and thus proved to be of a syphilitic character: my experience in this point is supported by Dr. Egan.[3] Such cases

[1] Adenitis.

[2] M. Ricord now denies the existence of primitive bubo, (see Letters by Stapleton, p. 42.) One is at a loss to understand this, when M. Ricord says, in his "Traité des Maladies vénériennes," p. 149, there are cases where it is impossible to discover any suspicious antecedent, and we must consequently be compelled to admit the "bubon dit d'emblée."

[3] Syphilitic Diseases, &c., p. 24.

have, however, been seen and verified by some modern surgeons of credit and experience, and, therefore, we can hardly doubt the existence of such buboes, although they must of necessity be rare.[1]

The first difficulty met with in the treatment of bubo, is that of ascertaining its new character, whether it is due to the absorption of venereal matter or not, and this is a point of very considerable importance, since it has a direct bearing on the subsequent treatment. Should a bubo succeed an ulcer on the penis, a discharge from the urethra, or come on after promiscuous sexual intercourse without these antecedents, it may be syphilitic, but in a great majority of instances it is not. When a bubo has suppurated, the pus which it has discharged, or that found at the bottom of the ulcer, may be tested. Should the characteristic pustule succeed, we have settled the question, the bubo is syphilitic.[2] But, on the other hand, should the inoculation not produce a characteristic pustule, are we to conclude that the bubo is not due to absorption, and consequently syphilitic? I have already shown why buboes are much more rarely successfully inoculated than chancres. The virus is modified or diluted in its passage through the absorbent vessels and glans by the contents or secretions of these parts, (see page 31.) This is evidently the true explanation why inoculation is not a certain test of the true nature of a bubo. Even M. Ricord admits that inoculable pus is never met with beyond the first glands in connexion with chancres. (Letters by Stapleton, p. 44.) "Whilst, therefore, I admit that this test, when applied to the inguinal glands, will in many instances serve to distinguish the nature of bubo, I cannot concur in the conclusion at which M. Ricord arrives when he states that inoculation in bubonic enlargements may be relied on as forming an unexceptionable and pathognomonic sign." (Egan, op. cit., p. 22.) Inoculation is of value here, as in chancre, only when followed by positive results.[3]

The causes of bubo, or of adenitis, are various: besides syphilis and gonorrhœa, they frequently arise from excessive indulgence with a healthy female, from fatigue, jumping, swimming, skating, long journeys on foot, sudden and violent exertion, or from ulcers

[1] Even before a bubo has discharged externally, its contents, when it has suppurated, may be tested, by introducing a fine electro-gilt test needle, and withdrawing some of the pus, which may thus be tested by inoculation. The puncture thus made should be touched with a crayon of nitrate of silver when the needle is withdrawn.

[2] See Vidal (de Cassis,) Traité des Maladies vénériennes, pp. 201–3.

[3] See also Fabre, Bibliothèque du Médecin Practicien, tom. vii., p. 224.

situate upon any part of the lower extremities; also from piles, ulcers, or condylomata in the vicinity of the anus. Any stimulus acting for a longer or shorter period of time upon the inguinal glands, is liable to be followed by simple bubo. A strumous diathesis is a frequent cause of bubo. This form of bubo occurs where syphilis is complicated with other diseases, such as albuminuria, phthisis, or a general cachectic, strumous, or bad habit of body. In such cases the enlargement of the glans arises slowly, the tumour is lobulated, puffy, and uneven, affecting the glans on both sides, in the femoral frequently, as well as the inguinal region; it remains long indolent, or suppurates imperfectly, discharging a badly formed pus, the abscesses running frequently into troublesome sinuous ulcers, surrounded by much induration. The use of caustics, or irritating dressing to primary sores, is occasionally a cause of bubo, though this does not affect the general question of the utility of caustics under such circumstances. The cases are rare, but still this must be admitted as one of the occasional causes of bubo.

It is of great importance to the patient that a bubo should be dispersed, if possible, and not suffered to suppurate; the latter process leading to a long and troublesome affection, fraught with endless inconvenience, pain, and even danger. An abortive treatment has been attempted here, as well as in gonorrhœa and chancre, but, as in these diseases, with an uncertain success. In the first stage of bubo, if much inflammation, pain, or tenderness be present, rest, with local bleeding, blisters, tartar emetic, and the application of ice or cold evaporating lotions, are the appropriate remedies. If the inflammatory symptoms are not marked, and the bubo be indolent, rest and compression alone may be resorted to. It has been remarked that patients wearing trusses seldom have a bubo form on the side where the truss presses; hence, in the first stage of bubo, that of simple enlargement, without much inflammatory action or pain, a well regulated pressure is frequently successful in dispersing the tumour. It must be associated, however, with rest and an antiphlogistic regimen.

The same plan of treatment may be followed in the treatment of the true syphilitic bubo, unattended by much pain or inflammation. In this stage, unless specially contra-indicated, mercury may be employed to assist the resolution of the tumour in bubo. The primary syphilitic bubo may (says Dr. Wallace,) in its first stage, be resolved, in ninety-nine cases out of a hundred, by mercury;

if this medicine be used after the plan recommended for primary syphilis, and if its operation be assisted by rest, laxatives, abstinence, and cooling lotions.[1] It is well, in reference to this opinion, to remark, that a vast number of those buboes which succeed to primary ulcers do not furnish or secrete a specific pus. Hence it must be evident that the general employment of mercury is, to say the least, unnecessary, except so far as it may be used with a view of controlling inflammatory action. Cullerier thinks that, at this period, uncertain as we must be as to the true character of the bubo, that it should be treated as a pure and simple inflammation. When accompanied by chancre, it is of vast importance to our success in the resolution of the bubo to allay all pain or irritation which may exist in the sores themselves; and for this purpose the aqueous solution of opium before recommended will be found of great service.

When the commencement of bubo is accompanied by much pain, tenderness on pressure, or heat of parts, the local abstraction of blood may be necessary, although I have not a high opinion of this measure in the resolution of bubo generally. It may even be necessary to bleed from the arm if the patient be plethoric, and the local disease associated with general excitement or much symptomatic fever. In local bleedings thus employed, it will be found advantageous to apply a small number of leeches, from four to eight, or more, and wait till the oozing of blood begins to cease, then, to apply another relay of leeches so as to keep up a constant draining of blood from the part for twelve or more hours. This form of bleeding, termed "permanent," is found to reduce the inflammation more certainly and speedily than the application of a large number of leeches at once. Two, three, or more relays of leeches may be thus employed, proportionate to the strength of the patient and the intensity of the local disease.

The method originally proposed by M. Malapert, a French army-surgeon, is sometimes calculated to disperse the incipient bubo. This method consists in the application of blisters, and a solution of the bichloride of mercury.[2] The bubo is to be covered with a blister about the size of half a crown, larger or smaller, according to the size of the tumour; the following day, when the epider-

[1] Op. cit., p. 356.

[2] Archives générales de Médecine, Mars 1832. Du traitement des maladies vénériennes par l'application directe du deuto-chlorure de mercure en dissolution sur les tissues affectés primitivement ou consécutivement.

mis is detached, a small portion of lint is to be moistened in a solution of the bichloride of mercury,[1] and laid upon the denuded surface. This is to be kept in its place for two hours by bandages, or strips of adhesive plaster; when it is removed a dark brown eschar will be found already formed. The parts are now to be covered with a simple poultice, a cooling lotion, or a solution of opium, and the patient is to be kept as quiet as possible till the eschar thus produced has separated; when this has taken place, the tumour is found materially diminished, or altogether gone. If the tumour be of large size, or very indolent, a second or even third repetition of the process may become necessary.

This plan of treatment is most certain in its effects if employed in the first stage of bubo, when the inflammatory symptoms do not run high; it may be resorted to in other forms of the affection, but not with so well-grounded a hope of its success. When the tumour has involved to much extent the cellular tissue of the groin, and the accompanying inflammation is great, it will be well to mitigate at least the inflammation before the blister, &c. is resorted to. Indeed, in the employment of this method, we are not to lose sight of those other means of known efficacy which the established practice of surgery indicates.

Other caustics have been employed to form an eschar on the surface denuded by the blister, such as the sulphate of copper, in the proportion of two drachms to the ounce of water, the nitrate of silver, the chloride of zinc, or tincture of iodine. These, however, are not preferable to the bichloride of mercury.[2]

When a bubo has suppurated, this method may be still occasionally employed with success, if the skin covering the abscess is thick; at this period it very commonly succeeds in dispersing the bubo without having recourse to puncture, &c. If the integuments are thin, and the collection of pus on the point of discharging itself, it ought not to be used.

There are many objections to this plan. The application of the caustic is accompanied by severe pain; the eschar produced is a long time separating, and I have seen a troublesome sore result which has taken a long time to heal. It does not always succeed,

[1] ℞. Hydrargyri bichloridi, gr. xx;
Aquæ destillatæ, ℥j.

[2] Dr. Wallace resorts to a similar mode of practice in the treatment of indolent buboes; this consists in "the vesication of the surface of the tumour with the nitrate of silver, if there be not much increase of heat in the part."

and I have more than once seen a bubo proceed to suppuration, uninfluenced by the treatment. In hospital practice, I have recourse to it occasionally, where the patient is confined to bed, and time not an object. In private practice, it is a plan fraught with inconvenience, and I would rarely recommend or sanction its employment.[1]

M. Ricord thinks that this method, however certain in its operation, should be used only in cases of bubo succeeding to chancre, and which may be presumed of a virulent character. In ordinary cases, pressure; discutient plasters or lotions; compresses soaked in solutions of the acetate of lead, or muriate of ammonia,[2] or plasters of belladonna, lead, iodine, or mercury, are to be preferred![3] When much pain and tenderness exist, bleeding becomes necessary, with the application of strong aqueous solutions of opium.

In the treatment of indolent bubo, in the commencement, recourse may be had to discutient plasters with compression and friction with the iodide of lead. If this has not a marked effect upon the enlargement in a few days, blisters with the bichloride of mercury on Malapert's plan may be employed. Frictions with ointments composed of the iodides of lead or mercury,[4] or com-

[1] See the remarks by Cullerier, on the employment of this method, in Lucas Championnière, "Thérapeutique de la Syphilis," p. 356, et suivantes; also by M. Ricord, pp. 582–4.

[2] ℞. Plumbi acetat., ℈ij;
Aquæ, ʒxvj. M. (Ricord.)
This is the "eau blanche" of the French hospitals.
℞. Ammon. muriat., ʒij;
Acidi acetic.,
Sp. vini, āā ʒij;
Ext. belladonnæ, ʒj;
Aquæ rosæ, ʒxiv. M.

[3] For this purpose may be employed the "Emp. Ammoniac. c. Hydrargyro" of the London Pharmacopœia, the Emp. de Vigo, of which I have already given the form. Or,
℞. Emp. belladonnæ, pts. viij;
Plumbi iodidi, pt. j. M.
℞. Emp. "de Vigo" c. mercurio, pts. iv;
Extract. belladonnæ, pt. j. M. (Dupuytren.)
℞. Emp. belladonnæ, ʒiv;
Iodinii, ʒj. M.
℞. Emp. hydrargyri, ʒiv;
Iodinii, ʒj. M.

[4] ℞. Hydrargyri iodidi, ℈j;
Adipis, ʒj. M. ft. unguent.

presses soaked in a dilute tincture of iodine,[1] are also very useful in the resolution of the chronic or indolent bubo.

The disease may terminate in two ways: the enlarged glands may pass on slowly to suppuration, or assume a form of induration of a scirrhous or scrofulous character. In the latter form, the application of the tincture of iodine, or the emp. belladonnæ with tartar emetic, may be used as local applications. Small issues may also be formed over the indurations by means of the caustic potash. The progress, complication, and termination of bubo will depend very materially upon the constitution of the patient, and the condition of his general health; hence, the latter demands the strictest attention on the part of the practitioner. The organs of digestion, and the state of the viscera of the chest and abdomen, should be carefully attended to; we must, to the utmost of our power, take care that no complication on the part of the latter organs interfere with the local disease, and endeavour by appropriate treatment to combat any general cachectic state that may be in existence, and which may not only prevent the resolution of the tumour in the groin, but favour the extension of disease to other parts of the glandular system. For these purposes an antiphlogistic treatment may be necessary on the one hand, whilst, on the other, the internal exhibition of mercury, iodine, or sarsaparilla, may be useful, either simply or in any of the forms of combination which have been previously indicated.

When fluctuation is evident, more particularly if the skin covering the tumour be thin, it will generally be useless to lose time in attempting longer the resolution of the tumour. It will, as a general principle, be better to open it at once, either with the scalpel or the knife. Dr. Wallace believes that buboes, in their stage of suppuration may be resolved by mercury if it has not been used earlier in the disease; and M. Reynaud has succeeded in dispersing them by the blister with caustics. These remedies are, however, to say the least, uncertain at this period, and we are more likely to save time, and our patient's constitution, by opening the bubo at once.

The bubo may have suppurated freely, and the collection of matter be large, and the surrounding tissue little indurated, or there may be much surrounding induration, and the collection of matter small and deep-seated. In all cases, the best general rule of prac-

[1] ℞. Tinct. iodinii Co., ℥j;
Aquæ destillat., ℥ij. M. ft. lotio.

tice is to open the bubo as soon as fluctuation is evident.[1] "In fact, incision into a bubo, when in the state of incipient suppuration, will in general as effectually put a stop to its progress as it will to that of anthrax when in an analogous state. I would even say further, that we may, perhaps, uniformly stop the increase of bubo by a sufficiently free incision in its first, second, or third stage, *i. e.* before matter is formed."

When the integuments covering a bubo are of a deep blue colour, more or less disorganized, or threatening gangrene, it is better to open the abscess with the potassa fusa, or some other caustic, than by simple incision. Where it is impossible to save the integuments, from their thinness and the degrees of disorganization which they have undergone, Desruelles and Wallace prefer opening the abscess with caustic; the surface of the skin is to be destroyed by the potassa fusa, or other appropriate escharotic, to the proposed extent, and the next day a puncture made with the lancet in the centre of the slough thus formed. Where, however, it is probable that the integuments may be saved, the nitrate of silver is to be rubbed "on the surface of the bubo, and of the surrounding diseased skin, previously moistened with tepid water, until the cuticle is rendered of a bluish colour to the extent of an inch beyond the diseased integuments covering the tumour." On the following day, a puncture is to be made in the thinnest part of the integuments, and a compress and roller are to be applied. When the surface of the cuticle has become dry after the first application of the caustic, it may be reapplied over the integuments as before. This local treatment recommended by Dr. Wallace, almost universally succeeds in causing the sides of the abscess to agglutinate and the external wound to heal.[2]

The open or ulcerated bubo may assume many morbid conditions which prevent its cicatrization. In the first place, the inflammation which sympathy, or the absorption of the venereal poison, has occasioned in the glands of the groin, and which has terminated in suppuration, may continue to be violent after the pus has been evacuated; and hence, one obstacle to the cicatrization of the ulcer is a degree of inflammation in the part itself. This undue excitement results either from a continuance of the original inflammation, kept up by exercise of the diseased part, by too nourishing a diet or other causes, or from the imprudent and too early local applica-

[1] See the principles inculcated by Ricord, p. 595, and by Dr. Wallace, pp. 360–1.
[2] Wallace, pp. 377–8.

cation of stimulating dressings. In this form of the disease, the patient will derive benefit from repose, low diet, gentle aperients, anodyne fomentations, and the application of compresses soaked in an aqueous solution of opium. The opiate, or simple cerates, are the most appropriate dressings; and these may be assisted by gentle pressure, by means of compresses and a roller methodically applied.

Again, the surface of the open bubo is commonly covered with a thick slough, the ulcer itself is indolent, or disposed to spread, and its edges are red, angry, and elevated. This is the most ordinary condition of the true virulent bubo: and all that has been said on the ulcerating stage of chancres is applicable here. It becomes necessary, in these states, to destroy the diseased surface of the sore by means of caustics; and for this purpose the nitrate of silver, the mineral acids, or the acid nitrate of mercury, may be employed. The dressings well suited to this form of bubo, are Ricord's aromatic wine, with or without opium or tannin; this, as in the case of chancre, may be alternated with some digestive ointment,[1] solutions of the sulphate of copper or zinc, or a weak solution of the chlorides of lime or soda. Creasote is also very useful as a local application, more or less diluted.

In chronic open indolent bubo, with a foul surface, where most remedies have failed in modifying the condition of the sore, M. Cullerier employs occasionally, as a caustic, three, four, or five grains of the bichloride of mercury dusted over the surface of the sore, and suffered to remain for some hours. The application of the remedy is followed by severe pain and inflammation, but generally succeeds in producing a healthy condition of the sore, speedily followed by complete cicatrization.[2] The indications of all local applications are to be sought for in the condition of the sore; they require constantly to be changed; what is useful to-day may be injurious to-morrow.

A formidable obstacle to the cicatrization of an open bubo is occasionally presented by the edges of the sore itself. The integuments covering the cavity have lost part of their vitality; they are

[1] The reader will find the particular forms for the preparation of these remedies, in the previous pages of this work, under the article Primary Venereal Sores.

[2] This practice originated with Dr. Ordinaire. He first employed it in the treatment of cancerous or foul sores of the rectum, nose, and other parts. The results of the method were so favourable, that Cullerier tried it at the Hôpital des Vénériennes in the treatment of foul indolent bubo. It has in many cases exceeded his most sanguine expectations.

more or less discoloured, indolent, or indurated, and offer no disposition to adhere to the under surface of the sore, or to throw up granulations by which the ulcer might be filled. In this condition they offer a permanent obstacle to cicatrization, and it becomes necessary to adopt means to bring about their union with the subjacent parts, or else to remove them altogether by the knife, scissors, or caustic. To accomplish the first intention, the under surface of the integuments may be rubbed with the sulphate of copper, the nitrate of silver, or some other caustic, the cavity of the ulcer filled with soft lint, covered with some dressing suited to the condition of the sore, and a bandage and compress applied.

When it becomes necessary to remove the floating portions of integument, caustics or the knife may be used, but this operation must not be performed on a truly venereal bubo in a state of ulceration, inflammation, or great irritability. These conditions must be subdued before such an operation is thought of. The late Dr. Wallace thought that the removal of the diseased integuments covering an open bubo might in most instances be prevented "by the vesication of the diseased integuments, and also of the sound skin for a little way beyond them by means of the nitrate of silver." The application of the caustic is to be renewed every four or five days, or as often as the surface of the integuments to which it might have been applied becomes covered by a new cuticle. It will also be useful to apply it occasionally to the whole ulcerating surface, and to the orifices of any fistulous openings that may exist, not with a view of destroying exuberant granulations, but to excite the granulating surface to more healthy actions.[1]

Dr. Wallace states that he has known loose portions of integument of several inches in diameter, which were so diseased in their structure that they lay on the surface of the ulcer like a dead flap, saved by this process. "I have also," continues this author, "accomplished the cicatrization of other ulcerations, which presented numerous fistulous openings or detached flaps, and in which all the ordinary means, such as injections, compresses, incisions, &c., had all been employed in vain. In short, I can most confidently recommend this treatment of indolent and atonic ulceration, &c., as well as that of abscesses of the same class, as a very great improvement in the general practice of surgery.

The internal surface of the open bubo is rarely smooth, uniform,

[1] See Wallace; op. cit., p. 381.

or continuous; it is generally uneven and irregular, frequently divided into compartments, or presenting numerous orifices which are the openings to other glands which have suppurated, and thus open by small orifices into the chief or general cavity, which is very commonly an abscess in the cellular tissue surrounding the gland or glands which have been originally the seat of irritation. It is this pathologic condition of open bubo which renders the treatment so difficult and tedious.

Injections may be employed in the treatment of these fistulous openings with a view of modifying the condition of their surfaces, and disposing them to cicatrize. Solutions of the sulphate of copper, the nitrate of silver, the sulphate of zinc, or bichloride of mercury,[1] may be thus employed.

If appropriate dressings and compression fail in the treatment of these fistulæ or sinuses, it may be necessary to lay them open with the knife. Sometimes the enlargement of the orifice is sufficient, or it may be necessary to divide them in their whole length, or if the situation of the sinus permit, a counter-opening will generally answer all the purposes of complete incision, a practice attended with much terror and pain to the patient. Cullerier speaks highly of counter-openings made with the caustic potash; the caustic as well as the opening may contribute to the cure in these cases. The fistulæ may likewise be cauterized internally by means of solid nitrate of silver, or a small portion of the powdered bichloride of mercury introduced by means of a grooved director; this practice is painful, but generally successful in its results. Lastly, the whole external skin, corresponding to the sinuses, may be vesicated with the nitrate of silver, in the manner recommended for the treatment of loose portions of integument.

The internal use of iodine alone or combined with potass or mercury, is of great service in the treatment of chronic ulcerated bubo. To the consideration of the employment of this remedy I shall return when treating of the constitutional forms of syphilis.

[1] ℞. Cupri sulph., gr. ℈j;
Aquæ dest., ʒj. M.

℞. Argent. nit., gr. vj;
Aquæ, ʒj. M.

℞. Zinci sulph., gr. x;
Aquæ, ʒj. M.

℞. Hyd. bichlorid., gr. j;
Aquæ, ʒj. M.

Many causes will predispose a patient with a primary venereal sore to the occurrence of bubo. Amongst these may be mentioned a bad habit of body at the time of contracting the infection, a previous disposition to glandular enlargements, a scrofulous constitution or taint, full or high living, with errors or irregularities in diet; such predisposing causes may be termed general. There are others which we may denominate special; such are the long continuance of the primary ulcer in an indolent or ulcerating condition, the use of stimulating or irritating dressings, much exercise either on horseback or foot, and the absence of the suspensory bandage.

It is of vast importance to prevent the suppuration of a bubo, since matter once formed and evacuated is often succeeded by sinuses and troublesome ulcers, which are exceedingly tedious and difficult to cure. In hospital practice we can commonly succeed in dispersing a bubo, because we can make the patient do as we choose; but in private practice, where concealment is necessary, it becomes a more serious matter.

When, as a consequence of a primary venereal ulcer not yet healed, or just healed, we perceive enlargement with tenderness in the groin, producing stiffness when the patient walks, we may be sure that a bubo is about to form. I would not recommend the old-fashioned practice of applying leeches; it is a practice generally very unsatisfactory, rendering the cure long, uncertain, and tedious; we must insist upon a strict regimen on the part of the patient, and absolute rest, if possible. The bubo may be frequently bathed with hot, not warm, water, and half-grain doses of the tartar emetic exhibited, as recommended by Mr. Milton; or the part may be smeared thickly over with mercurial ointment; over this a linseed or a bread poultice, cold, and a piece of oiled silk to keep it moist, confining all by a bandage. Pressure may also be made by the emp. ammoniaci c. hydrarg., spread on thick wash leather, the plaster to be placed lengthways, parallel to the thigh, and not at right angles with it; this prevents the plaster getting displaced when the patient walks. The best means of all, however, is to paint over the enlarged gland night and morning with a strong solution of iodine and hydriodate of potash,[1] should the inflammatory symptoms not be too active.

[1] ℞. Iodinii, ℈j;
Potass. hydriodatis, ℈ij;
Aquæ, ℥j. M.

In the intervals of the dressings pressure should be made by a pad and bandage. If the patient has not used mercury for the treatment of the primary sore, the dispersion of the bubo will be hastened by now administering it, in combination with the tartrate of antimony, so as gently to affect the system, always presupposing that the patient is in a condition to bear mercury.

Should these means not succeed (which in a majority of instances they will,) and suppuration appears inevitable, it must be hastened by warm poultices and fomentations.

When matter is ready to be discharged, a question of very great importance suggests itself, viz., how should this be done? Many surgeons open the abscess freely with the bistoury or lancet, whilst some prefer the potassa fusa for this purpose. I would not, under ordinary circumstances, recommend either of these methods.

When a bubo is ready to puncture, I would not advise a free incision; for almost under every circumstance where this is practised, there is a quantity of integument in the edges, which will not unite with the granulating surface of the sore thus produced. By opening an abscess in this way the whole anterior wall of it is destroyed, and the cure must be performed by the cicatrization of a granulating surface which springs from the floor or posterior wall of the abscess. The great object is to evacuate the matter first, then to diminish the disposition to its re-formation, and lastly to procure union of the two sides of the cavity. This may generally be done in the way I have adopted in the treatment of chronic abscesses in the Queen's Hospital, and which has been so successful in a great many instances. When a bubo is ready to be opened, we should not suffer the skin to become too thin, but make several very small punctures over its thinnest part with a grooved needle, perhaps six, eight, or ten; through these the matter will ooze out till the cavity of the abscess is empty. Through one of the punctures the point of a very small glass syringe may be introduced, and a very weak solution of the sulphate of zinc injected, in the proportions of two or three grains to the half pint of water. When the abscess is quite empty, place over it a large compress of lint, and use moderately tight pressure by means of a roller. In many instances, if we can keep the patient quiet for twenty-four hours, we get either partial or total adhesion of the sides of the bubo, and a speedy cure will be the result; in other instances this may not be the case, but by the daily use of the injection through one of the punctures, which should be kept open for that purpose, we suc-

ceed in a few days, in almost every case, in effecting a cure. If the skin is thin, the bubo may also be opened with a fine seton needle, containing five or six threads of silk; the seton should be passed in the axis of the bubo, and suffered to remain two, three, or four days, according to circumstances; it may then be withdrawn, and injections practised, as already directed, through the orifices left.

I generally employ for an injection in these cases the weak solution of sulphate of zinc. I have used also a weak solution of iodine and hydriodate of potass.[1]

The injections must be varied in strength to suit the feelings of the patient; a gentle warmth and slight irritation should be experienced, but violent pain on no account produced. Solutions of the sulphate or acetate of copper, alum, port wine with tannin, may all be used; and if one does not succeed quickly, we should have recourse to another.

This is the best way of treating a suppurating bubo with which I am acquainted.

After the numerous instances we have seen of foul, extensive, burrowing sores, in the hospital, which have been produced solely by laying buboes freely open, which sores have been for months in existence, we must be quite aware that some improvement is necessary in this branch of surgery. Ulcers, the result of bubo, with thick, hard, cartilaginous edges, have been treated in the hospital by destroying the edges and the surface with the potassa cum calce. Sinuses, resulting from the same cause, have been laid open and their edges destroyed in this way; and in many cases, I may say in all, for I do not know of a failure, the cure, although comparatively tedious, has been satisfactory.

[1] ℞. Iodinii, gr. iv;
Potass. hydriodate, gr. viij;
Aquæ, ℥viij. M. ft. injectio.

PART II.

CONSTITUTIONAL OR SECONDARY SYPHILIS.

CHAPTER XIII.

OF CONSTITUTIONAL OR SECONDARY SYPHILIS.[1]

CONSTITUTIONAL or secondary syphilis consists of a class of morbid actions, which make their appearance sooner or later after a discharge from the urethra, or after the healing, or during the course of a primary venereal sore on the genitals or elsewhere, or, again, it is due to other causes hereafter to be mentioned.

The phases of syphilis have been divided into the primary, the secondary, and the tertiary, or, as Hunter has already laid down, constitutional affections of the first and second order of parts. The primary symptom is due to the direct application of the venereal poison by means of sexual intercourse, or inoculation. It is capable of propagation, from one individual to another, by intercourse or inoculation. It is not capable of being transmitted by way of hereditary taint; a female having a chancre at the period of parturition may produce, by inoculation, the same disease in her infant. The primary symptoms may be followed by a series of symptoms which are successive or continuous, but not constitutional or secondary; these are new chancres, buboes, or abscesses, &c., of various kinds, these being in their onset purely local, and not dependent upon an affection of the constitution generally.

Secondary symptoms are those which make their appearance after the economy has become generally tainted by the venereal

[1] Syphilis constitutionnelle; accidents secondaires et tertiaires. (Ricord.) Maladies vénériennes consécutives. (Desruelles.)

poison, during which process the matter has undergone modifications which, in some measure, change its character. Secondary syphilitic diseases generally appear on the skin, or mucous membranes, in the eyes, or the testicles, &c. Constitutional syphilis rarely makes its appearance before the second week after primary infection, more commonly later, towards the fourth or fifth weeks, or at periods very much more remote.

When syphilis has continued in the economy for an indefinite period of time, we observe the symptoms which are termed secondary to disappear, or to lose the properties which at first characterized them, whilst others of a different kind succeed, to which has been applied the term of "*tertiary.*"[1] The tertiary symptoms appear at an indefinite, and generally very long period, after the primary diseases, and in the greater number of subjects, either after secondary symptoms have disappeared, or whilst these are still manifest in the constitution; thus it is exceedingly common to see scaly or pustular diseases of the skin coexisting with diseases of the bones or testes. The diseases which have been termed tertiary are deep-seated diseases of the skin, as tubercles, and affections of the glands and bones, as periostosis, exostosis, caries, necrosis. To these may be added various internal affections, as yet neither well known nor described. M. Ricord has presented to the Royal Academy of Medicine specimens of tubercles of the brain, which he believes to be of syphilitic origin. The tertiary symptoms are not hereditary, under any specific form of venereal affection. The children of persons thus affected are very commonly scrofulous, phthisical or predisposed to cancerous diseases. Many of the constitutional forms of disease are capable of propagation by contact or inoculation; and in persons cohabiting as man and wife, a syphilitic symptom existing in one is very commonly produced in the other, in precisely the same form.

It may be naturally inquired here, whether any treatment of the primary disease can certainly prevent the secondary. This question has also been agitated by Ricord. This author states, that he has not been able to meet with any recorded fact where a primary venereal sore healed in five days has been followed by se-

[1] The diseases which have been termed tertiary, such as affections of the bones, &c., are not always the last to appear, neither are they in all instances preceded by what are termed secondary diseases, such as affections of the throat and skin. Primary diseases are sometimes immediately followed by affections of the periosteum and bones: I have given several examples of this in the course of this work.

condary symptoms; neither has he ever observed such a circumstance in his own practice. The probability of secondary symptoms is in direct proportion to the duration of the primary disease; the longer this continues the greater is the chance that the constitution may become affected; hence, that treatment is the best prophylactic under which the sore most rapidly heals, without induration of its cicatrix. The early and complete destruction of the primary disease, by an escharotic that will disorganize the tissues to the depth of the ulcer before absorption has taken place, is the only certain mode of preventing constitutional taint. I have before stated that the nitrate of silver is useless for this purpose; and the only caustics that will char the tissues to the depth of the ulcer are the potassa-fusa, the potassa cum calce, or the acid nitrate of mercury: the first two are certainly the most effective. This practice is useless in a chancre already specifically indurated, the induration itself being an indication that the constitution is already affected, and the local disease only to be cured by constitutional remedies.

Unhappily there are numerous reasons why the practice just recommended cannot always be adopted with a prospect of success. In many instances the surgeon is not consulted till many days after the establishment of the disease, when, in all probability, absorption has already taken place. In other instances, the situation and character of the ulcer are such that we are prevented resorting to the method recommended, though in all instances it should be done, if at all practicable.

All persons are not equally susceptible of a constitutional infection from a primary sore; hence some writers have spoken of the syphilitic temperament, a vague expression, to which no definite meaning can be attached. Those individuals are most likely to suffer from constitutional syphilis whose general health is bad when they contract a primary sore; hence, chronic affections of the skin, stomach, or digestive organs, scrofula, general cachexy, or other diseases, general or particular, under which the patient may labour at the time of infection, are to be considered as predisposing causes. Attention to the general health is of the first importance, and the constitution of our patient must most materially modify our treatment.

Secondary syphilis, like primary, only becomes formidable by neglect and ill-treatment; it is a principle we should never lose sight of, to commence seriously the treatment of constitutional syphilis, the moment it becomes manifest in the economy. There

is no contra-indication to the immediate commencement of this treatment: should the constitution be bad, or the patient diseased, it must be modified to suit these circumstances: even the period of gestation is no bar to the anti-syphilitic treatment. M. Ricord states that he has seen more females miscarry when their disease has been suffered to go on unchecked, than when they have been subjected to an anti-syphilitic treatment, framed with judgment to suit the circumstances of the case. The same remarks apply to the period of suckling.

When constitutional syphilis is complicated, these complications should never be neglected: if they coexist with acute or subacute affections of internal organs, the latter ought first to be attended to; these should be subdued before we commence the anti-syphilitic treatment. When scrofula, affections of the skin, or chronic diseases of internal organs, complicate constitutional syphilis, the anti-syphilitic treatment may be at once commenced, but it must be framed and conducted with much care, that the accompanying affection, of whatever character it may be, may not be aggravated by it. An exclusive, or empirical treatment, cannot be too strongly condemned. It is in these cases that the compounds of iodine and mercury, iodine and iron, and iodine and potass, are commonly so useful, but, above all, the mercurial vapour bath.[1]

Whenever any of the forms of constitutional syphilis are accompanied by fever, or much inflammation, a strict antiphlogistic treatment and regimen are absolutely necessary. Without a rigorous observance of this rule we can have no rational hope of success. Whatever be the character of the constitutional symptoms, if they are accompanied by local inflammation, or general excitement, a rigorous antiphlogistic regimen and treatment ought to be followed till the vascular excitement is subdued. An antiphlogistic treatment is not to be adopted where these phenomena are absent, and of course its employment as a general measure is to be severely condemned, for in many cachectic or scrofulous patients, or those whose constitutions are already undermined by chronic disease, an opposite plan of treatment becomes necessary. In the latter instances, a full, nutritious diet, is essential to the success of the

[1] See the whole of the excellent remarks of M. Ricord, on Complicated Constitutional Syphilis, op. cit., pp. 615—18.

"En un mot, l'accident le plus saillant, l'épiphénomène, quel qu'il soit, est celui qu'il faut d'abord combattre, sans negliger aucun des élémens qui peuvent fournir aux indications thérapeutiques.

treatment. Long experience has taught me that debilitated and scrofulous patients, who have been badly fed, quickly recover their general health, and are cured of syphilis under a full diet; whilst those whose circumstances have enabled them to live well, frequently become cachectic under a low diet; their syphilitic affections remain stationary, and they only recover their health, and lose their disease, in returning to the habits of living to which they have been accustomed.

That the internal treatment adopted against any particular form of constitutional syphilis may have every chance of success, it is also necessary that the stomach and bowels be kept entirely free from all irritation or disease.

CHAPTER XIV.

OF THE CAUSES OF SECONDARY, OR CONSTITUTIONAL SYPHILIS.

THE chief causes of a constitutional venereal taint are: 1. The absorption into the system of the virus from a primary venereal disease, whether this be a sore, a discharge, or a bubo. 2. Inoculation or contagion, *i. e.*, the direct communication of a secondary or constitutional affection, from a diseased to a healthy person, without the intervention of any primary disease. 3. Hereditary transmission. 4. The treatment of the primary disease, whether due to the use or to the neglect of mercury. 5. A peculiarity of constitution.

I.—PRIMARY ULCERS AND DISCHARGES CAUSES OF SECONDARY SYPHILIS.

It is universally admitted that the most frequent cause of a secondary venereal disease is a primary venereal ulcer, and it is also as generally admitted that the ulcer which is most commonly followed by such a condition is one which presents a well-marked induration during its course, or is so where the cicatrix or site of the ulcer becomes indurated when the ulcer has closed. Other ulcers, however, which do not present this appearance of induration, are occasionally though not so frequently followed by secondary symptoms. Again, many forms of primary discharges from the urethra are followed by secondary diseases: it is well known that M. Ricord considers such discharges as symptomatic of primary venereal ulcers in the urethra. Certain it is, however, that discharges from the urethra, in which no ulcer can be discovered, and where no circumscribed induration can be felt along the track of the urethra, and where, again, the matter discharged has not yielded any characteristic pustule by inoculation, when tested, are occasionally, though not commonly, followed by constitutional diseases.

Case XVI.

Primary disease, discharge from the urethra; never, at any period, any other form of primary venereal disease; secondary disease six months after, in the testis and in the bones; cure by calomel and opium, and the iodide of potassium.

M. B——, æt. 30, came under my care as an out-patient of the Queen's Hospital, in July, 1849, suffering from enlargement of the right testis, pains in the arms, bones of the head, and other parts, with nodes on the head and clavicle, and general enlargement of the right knee-joint. One year and a half before his admission he contracted a discharge from the urethra, for which he had never been treated, and for which he had never taken medicine; this after a long period disappeared of itself, and left no induration in the urethra discoverable by examination, nor any impediment to the passage of an instrument, or to the stream of urine behind it. Six months after, his right testicle enlarged without pain; to this succeeded general pains in the limbs and head, which incapacitated him from work; and large nodes formed, two on the head, one of which contained matter, and one on the clavicle, with general bony enlargement of the knee.

He was put on the use of calomel and opium at night, with the iodide of potassium and colchicum in the day; and under this treatment all the symptoms disappeared. No change was made in the remedies employed.

The cases recorded by M. Cazenave are well-marked examples of constitutional diseases which had never been preceded by any primary disease, except a discharge from the urethra.[1] Mr. Erasmus Wilson,[2] Dr. Egan,[3] and others support this doctrine.[4] A great mass of the cases admitted under my care into the Queen's Hospital have been carefully recorded, and, although it is difficult in all cases, especially in hospital practice, to get correct histories, still a great number have been collected, which carry conviction to my mind that certain primary discharges from the urethra, of the nature already alluded to, are followed by secondary diseases not distinguishable from those which succeed to ordinary chancre.

What the nature of these primary urethral discharges may be,

[1] Cazenave; Traité des Syphilides.
[2] Syphilis, Constitutional and Hereditary, pp. 20, 21, 22.
[3] Egan; op. cit., p. 18, &c.
[4] British and Foreign Med.-Chir. Review, No. xv., p. 88.

is another question. If they result from an ulcer on the urethra, the existence of the latter must be a matter of conjecture, since we are unable to demonstrate its existence.

Case XVII.

Discharge from the urethra as a primary symptom; scaly blotches on the skin, and a node on the forehead, as constitutional symptoms; cure by the mercurial vapour-bath.

A gentleman consulted me respecting a lump on his forehead, which was red, tender, and painful; he had upon different parts of his body, and on the head more particularly, some dry, scaly blotches; his hair also came off rapidly. He had never suffered from any primary venereal disease, except a discharge from the urethra. When I saw him this no longer existed, the urethra presented no induration in any part, a bougie passed easily, and he made water in a good, free stream.

I recommended the use of the mercurial vapour bath, which was administered every other day. I prescribed no medicine internally. In a month the cure was complete.

I could bring forward many more cases which leave no doubt as to the fact that discharges from the urethra, apparently in no way different from ordinary gonorrhœa, and which are not accompanied or followed by any perceptible organic change in the urethra, are the primary causes to which secondary syphilis is occasionally due.

II.—CONTAGION A CAUSE OF SECONDARY SYPHILIS.

Constitutional syphilis may be communicated from a diseased to a healthy person, without the intervention of primary disease. I do not mean to assert that constitutional syphilis is commonly capable of propagation by inoculation, and I have never succeeded in producing any effect of this kind by inoculations practised on an individual, already diseased, by his own secretions; and I have never attempted, and never shall, to propagate secondary syphilis from the diseased to the healthy. Waller[1] and Vidal de Cassis[2] have, however, succeeded in this. The case of M. Boudeville (in-

[1] Du caractère contagieux de la Syphilis secondaire, par le docteur Waller, in the 'Annales des Maladies de la Peau, et de la Syphilis,' tom. iii., p. 174.

[2] Traité des Maladies Vénériennes, pp. 240, 261, 355.

terne en pharmacie) who voluntarily submitted to inoculation with the matter of the secondary syphilitic pustule, and in whom a regular secondary pustular disease was produced, is conclusive on this point, (Vidal de Cassis, p. 357.) Although I have never seen secondary syphilis propagated by inoculation from the diseased to the healthy, I have seen it communicated, by contagion, in this way in a great number of instances; two I have already recorded. The circumstances under which this takes place are generally from the husband to the wife, where the primary disease having been cured for an indefinite period of time, a secondary attack takes place after marriage, and by constant contact is thus communicated to the wife.

In a number of instances, secondary venereal diseases, when propagated by contagion, produce their like. Thus skin diseases are communicated under the same specific form; so are secondary condylomata. Some modern authors (Waller, Erasmus Wilson,) maintain the propagation of constitutional syphilis by means of the secretions alone. The ovum is constantly diseased by the secretions of the father; hence there is every reason to suppose that such an origin of constitutional taint is exceedingly probable, especially when we consider the condition of the blood (whence all the secretions are derived) in secondary syphilis.

III.

Hereditary transmission as a cause or origin of constitutional syphilis, is too well known, and too universally admitted, to require me to dwell on it here. Its physiological nature is clearly a mode of contagion through the medium of the secretions, and, in most instances, the transmission takes place from the father to the ovum, the mother never having been diseased, and never having exhibited any symptom of disease.[1] If the mother be suffering from secondary syphilis, and give birth to a diseased child, the contagion takes place through the medium of the blood itself.

IV.

The general and medical management of the primary disease has, no doubt, a most material influence over the prevention or development of a constitutional taint. There is no reason why a grain of mercury should be exhibited for the cure of a primary venereal affection, which has, on the very first discovery of the dis-

[1] I have recorded in another part of this work several cases illustrating this point.

ease, been destroyed by a caustic sufficiently powerful. Many constitutions are inimical to mercury, and its exhibition so far disturbs the system that it cannot be borne, and its use must consequently be given up. There are other peculiarities of constitution, or conditions of constitution, in which, although mercury is borne, it appears to predispose to the occurrence of certain diseases, which are not known except the patient has had syphilis, and taken mercury for its cure.

Mercury is certainly not the general or common cause of secondary or constitutional syphilis, although its injudicious exhibition frequently produces very formidable constitutional mischief. Secondary syphilis occurs where mercury has never been used, and when administered for other diseases, even when pushed to salivation, never gives rise to diseases resembling secondary syphilis.

In 143 cases of secondary syphilis detailed by M. Cazenave, 46 had taken mercury for the primary disease, and 97 had taken none at all. These facts settle two points: 1st, that mercury does not certainly prevent secondary syphilis, and 2d, that it does not cause it. Mercury, however, must be considered as a most powerful therapeutic agent in the treatment of secondary syphilis, and it is in this class of syphilitic cases especially, that its judicious exhibition produces the best effects, when combined with other treatment, which I shall presently detail.

There is a great deal in the management of the patient generally, during the time a primary sore is under treatment, and as much depends upon the patient as upon the surgeon. I believe the ordinary methods adopted under these circumstances are not sufficient, and that the general habits and diet of the patient are not sufficiently attended to; for a constitutional disease is frequently developed under the combined influence of an over-stimulating diet and irregular habits, which, under different circumstances, would never have appeared at all. If, as some have supposed, and with reason, the primary forms of syphilis itself are occasionally developed under the repeated influence of ordinary irritation, how much greater is the reason for abstracting the patient from all sources of irritation, when the primary symptoms of disease are already present in the system. There is no question but that the local treatment of, and the constitutional treatment during the presence of a primary syphilitic sore, has an immense influence over the production of secondary or constitutional disease. An over-stimulating local treatment unquestionably disposes to the occurrence of bubo,

in the same manner that the glands inflame, enlarge, and suppurate, in the vicinity of irritations in other parts of the body; and it has been shown by the tables of M. Cazenave, (on the Syphilida, p. 511,) that secondary symptoms follow primary sores complicated with bubo, much more frequently than when the former symptom had occurred alone.

Many of the primary forms of syphilis are accompanied by a series of symptoms, which have been termed consecutive, and which are ordinary pathological phenomena, dependent upon irritation or inflammation, not of a specific character, but more likely to take place in some constitutions than others. If these are mistaken by the unlearned for specific diseases, and treated specifically by mercury, constitutional symptoms are almost invariably produced, when the simplest medication with unirritating local treatment and a regulated diet would in all probability have brought the primary disease to a safe and speedy issue, whilst the constitutional symptoms would never have appeared at all.

Another frequent cause of the occurrence of constitutional syphilis is, no doubt, the administration of mercury for the cure of primary syphilis at improper periods, whilst the economy is not prepared to receive it. A certain degree of constitutional disturbance, irritability, or fever, almost invariably accompanies the first days of a primary venereal sore, and during this period mercury should never be given, nor till the patient is prepared for it by low diet, aperients, and the warm or vapour bath. If mercury be administered during a condition of local or general irritability, constitutional symptoms are very likely to be developed. It is from this cause that we frequently see constitutional symptoms arising during the second or third weeks of a primary sore, where the patient has been suffered to follow his ordinary diet and habits. There are also certain conditions or forms of the primary sore, and different varieties of phagedæna, during which, if mercury be exhibited, secondary symptoms are very likely to follow. I have dwelt thus long on the true causes of constitutional disease, because of its immense importance;—no one knows, when once established, when it will be cured, or, in some constitutions, in what form it will return.

Again, there are other forms of constitutional disease, which must be considered as wholly independent of the treatment of the primary one, and which are the result of absorption of the poison of syphilis, and its mixture with the blood. The earlier symptoms

of constitutional syphilis in good constitutions appear most commonly under the form of diseases of the skin in the exanthematic form, accompanied by some degree of fever; but this is invariably of a more chronic character than that accompanying the eruption of exanthematic diseases, dependent on other causes. There is rarely anything specific in appearance in these diseases in the commencement, and the pustular or squamous appearance is seldom developed till the eruption is perfectly matured or in the decline. The mucous membranes are the next parts affected, particularly of the fauces and throat; deep redness, with superficial or deep ulceration, accompanying most commonly the earlier symptoms of skin disease. It is not often, if the primary sore have not been improperly treated, and mercury not hastily or injudiciously given, that the more formidable symptoms of constitutional disease make their appearance, before the healing of a primary sore, soon after it has closed, or whilst the cicatrix is yet hard. Neither do these symptoms appear in ordinary cases, unless they have been preceded by some affection of the skin or mucous membranes. There are, however, instances, and I have witnessed several, where diseases of the bones and periosteum (which are generally amongst the latest constitutional symptoms to appear,) have been ushered in almost before the primary sore has been healed.

Perhaps one of the most frequent causes of secondary diseases succeeding primary, and tertiary succeeding secondary, is the recommendation by the surgeon, and the adoption by the patient, of an incomplete treatment. Thus all treatment is very commonly given up by the patient as soon as a primary sore has healed, or an eruption disappeared, and the customary habits of life are at once resumed, diet neglected, and medicine thrown aside. In such instances we have only succeeded in getting rid of a symptom, not of eradicating a disease; and sooner or later other symptoms are made manifest, and they are generally of a more formidable character than those to which they gave place. Endless examples might be given, corroborating this statement; a patient has a better chance in following no treatment at all than following an incomplete one.

Treatments are rendered incomplete from two causes: first, from the adoption of inefficient remedial agents; and, secondly, from discontinuing the remedies too soon. If a primary sore be treated, the remedies should be continued for fourteen days at least after

it has healed, and hardness of the cicatrix disappeared; in the secondary forms of disease in the skin and mucous membranes, the patient should follow treatment for a month after the subsidence of symptoms. In the tertiary forms of tubercles, diseases of the periosteum and bones, the remedies should be continued for two or three months after the disappearance of the symptoms. The next common cause is, the inefficient or improper nature of the remedies used, or the irregularities of the patient during the time he is using remedies. If mercury be used, the proportions and that form of administration should be chosen which suit the patient; again, these preparations must be used at the times, and under the circumstances already laid down. With some patients all preparations of mercury taken internally disagree; they pass off by the bowels, or produce so much irritation that their use must be given up. In these instances, frictions or fumigations may be substituted for internal remedies; and these can very commonly be borne, and are useful when internal remedies are injurious. Under this head may be mentioned also the use of mercury for syphilitic symptoms which do not require mercury for their cure.

The neglect of warm, or simple, or medicated vapour-baths, during treatment, more particularly of the constitutional forms of disease, is, again, one of the most frequent causes why syphilis becomes protracted, and why it so frequently returns when it has been supposed to be cured. I have for the last sixteen years paid particular attention to this subject, and made numerous experiments in reference to it. I have treated many thousand cases, both in hospital and private practice, with and without the mercurial vapour-bath; and, as a general statement, in almost every form of constitutional disease, I believe I can truly say that the treatment is diminished from one-half to one-third of the time; the cures are vastly more certain, and there is no risk to the constitution of the patient, his health generally being improved by the treatment.

Vapour-bathing and mercurial fumigations have for a long period been employed in the treatment of syphilitic diseases, more particularly of the constitutional forms, and with the best success. I have adopted, however, a method somewhat different to any I have hitherto seen used; it consists in the application of mercurial vapour in a moist state to the surface of the skin, combining, in fact, the mercurial fume with the ordinary vapour-bath. I have made a number of experiments on this combination, and found it succeed

in a variety of cases, where ordinary mercurial fumigation, or the vapour-bath, employed separately, had failed.[1]

These baths should be associated with an appropriate internal treatment. I have frequently seen them succeed where internal treatment had failed, but in most instances they should be associated with it. Such, however, is their efficacy as an auxiliary measure, that in all instances the internal treatment may be of the mildest kind. When mercury is indicated, the assistance afforded cannot be too highly appreciated, since half the quantity of the remedy will suffice for the completion of the cure, which is accomplished without risk to the constitution of the patient; a circumstance so much to be feared under the old plans of mercurial treatment.

V.—PECULIARITY OF CONSTITUTION, OR HABIT OF BODY, A CAUSE OF SECONDARY SYPHILIS.

A peculiarity of constitution, or habit of body, is again to be looked upon as amongst the causes of secondary syphilis. Authors have imagined what they have termed a syphilitic temperament, but have failed to point out in what this peculiar temperament consists. A strumous habit has been considered as predisposing to the ravages of secondary syphilis. However this may be, it will be found that constitutional syphilis is often met with of the most obstinate kind in persons who, otherwise, appear in the best health, and in whom there is no evidence of struma. If the health be bad when a primary sore is contracted, there is greater reason to fear secondary disease than though the patient had been in good health at such time. "It is not sufficient," says M. Cazenave, "for the development of secondary syphilis that the poison should exist in the blood; it requires, occasionally, other causes of a non-specific or ordinary character to develop it. These causes are infinitely variable; a strong moral emotion, a blow, a fall, a vapour-bath, excessive fatigue, a debauch, &c., are amongst the occasional causes which give rise to an outbreak of secondary syphilis."[2] I have traced attacks of constitutional syphilis very frequently to circum-

[1] Of all the auxiliary remedies employed in the treatment of venereal diseases of the skin, the most valuable are, without exception, *Baths;* and at the head of these must be placed the various forms of vapour-baths. (Cazenave, on the 'Syphilida,' p. 214.)

[2] Cazenave; op. cit., p. 528.—See also Vidal de Cassis; op. cit.—Causes déterminantes, p. 264.

stances of this kind: atmospheric changes, and diet, are no doubt important agents in the development of secondary disease. I have seen one case where a well-marked venereal eruption occurred in spring and autumn for nine years; and a second, where an eruption occurred every spring for three; a third, where the best health had been enjoyed for twenty years, where violent exercise, followed by some fever, developed a most formidable attack of pustular syphilis, with sore throat and iritis. How often have I seen the symptoms of secondary syphilis reappear after indulgence in wine; and it very frequently happens that patients who have once suffered cannot indulge in the stimuli which, before disease, they used with impunity, without syphilitic symptoms showing themselves. An extreme cold sometimes retards the development of constitutional syphilis. I was consulted by an officer, in one of the Arctic expeditions, who had symptoms of secondary syphilis before leaving England, which entirely disappeared under the cold of the Arctic regions, but which reappeared when he returned home. These facts show that, independent of the specific condition of the blood, occasional causes have a great influence both on the development and course of constitutional syphilis.

CHAPTER XV.

DIAGNOSIS OF SECONDARY SYPHILIS.

THE diagnosis of secondary syphilis is not always certain, either in its acute or chronic form. When eruptions on the skin, or diseases of the throat, make their appearance within a few months after the existence of primary syphilitic diseases, and these symptoms have the well-known peculiar appearances of secondary syphilitic diseases, little doubt can be generally entertained of their nature; but in many instances, diseases which resemble syphilis are not syphilitic, and symptoms are really due to syphilis, which sometimes have not the characteristic aspect of this disease. Even M. Cazenave, with the experience of St. Louis to aid him, sees great reason for doubt on this point. "I repeat," says this author, "that it is of the first importance to distinguish a syphilitic eruption from one which is not syphilitic; but how are we to arrive at such a result?" (op. cit., p. 549.) It is difficult, in some cases, doubtless. I have already said that diseases of the throat and skin of peculiar aspect, occurring shortly after a primary disease, are generally syphilitic, especially if the patient have never before been subject to diseases of a like character. Sometimes our difficulties are increased by the patient stoutly denying the existence of any primary disease.

The symptoms of secondary syphilis, in its more acute forms, are seldom met with alone; secondary syphilitic diseases of the skin, whether scaly, papular, pustular, or tubercular, rarely occur without other symptoms of syphilis being present at the same time, and these concomitant symptoms are most commonly found in the throat in various forms of ulceration, of the soft palate, the tonsils, or the fauces. The sub-occipital lymphatic glands are also commonly enlarged in such cases, but they are also very frequently not affected.

Secondary and vesicular diseases of the skin, rare forms of disease, but of which I shall record a few examples, may be confounded with various forms of herpes, particularly herpes zoster.

Scaly diseases may be mistaken for the ordinary forms of lepra or psoriasis, or the reverse, and I believe this is a very common error; I have seen numerous examples of it. I have recently witnessed a very formidable case of secondary pustular syphilis, which, in the onset, had been mistaken for smallpox. The syphilitic pustule on the face may also be confounded with acne.

Whatever difficulties may surround the diagnosis of the more acute or earlier forms of secondary syphilis, these difficulties are vastly increased where syphilitic symptoms occur in an isolated form, after many years of apparently good health, and occasionally when the patient denies ever having had a venereal symptom at all.

Case XVIII.

Chronic disease in both testes, occurring as an isolated symptom of secondary syphilis; the diagnosis of the disease made out from the history of the patient's children; the patient denying the pre-existence at any time of any form of syphilitic taint.

A. L—, æt. 46, was admitted into the Queen's Hospital, for an ulcer on the scrotum, and enlargement of both testes, in November, 1850. Both testes were large, heavy, hard, and lobulated; and on the scrotum was a foul, dirty, deep ulcer, with thickened edges, which had first commenced as a pustule some weeks previously. This man had been married many years, and was the father of several children. He denied firmly that he had ever had gonorrhœa or syphilis at any period of his life. On stripping him, however, there were, on various parts of the body, cicatrices, which appeared to me similar to those which are left by the healing of sores consequent on the venereal pustule, but having had smallpox it was not easy to say to what they were due. On questioning him as to the health of his children and wife, it appeared that the first three children were alive and healthy; the fourth died at nine months old, and had sores on the genitals and on the nates; the fifth died at three months old with similar sores; the sixth was born dead, and had blotches on the body; the seventh died of smallpox at fifteen months old, but previous to this had sores similar to the other children; the eighth child is now alive, but has had the same sores, and is reported to be sickly and wasting. The wife is reported to be healthy, but some months ago had an eruption of blotches as large as half crowns. The patient was placed upon an appropriate anti-syphilitic treatment, and left the hospital with the ulcer healed, and the testes much reduced in size. He took

ten grains of the Pil. Hyd. Chlorid. co. every night, the Iodide of Potassium in five grain doses, twice in a day, and after the healing of the ulcer on the scrotum, was directed to use friction on the testes with the Unguent. Plumbi Iodidi.

It will be noticed that in this case the disease in the testes occurred as an isolated symptom; there was no other concomitant to assist the diagnosis; but the condition of his children at once removed any doubt as to the nature of the disease in the testes; syphilitic sarcocele very commonly occurs as an isolated symptom of constitutional syphilis, when no symptoms of the existence of this malady have been present in the system for years.

The ulcerated syphilitic tubercle on the face is very likely to be confounded with lupus. Cazenave considers the diagnosis, under many circumstances, as exceedingly difficult, but gives some rules which may guide us, which are not certain. The syphilitic tubercle is larger and rounder, of a dusky copper colour, and much less prone to ulcerate than that of lupus: in the ulcerated condition, the two forms of ulceration differ in some respects; the "syphilitic ulcer is deep, its edges swollen, of a dusky copper colour, and sharply cut; the ulcer produced by lupus is of a dull red colour, and looks as if confined to the surface of the skin."[1]

Case XIX.

Ulcerating syphilitic tubercle of the lip and nose; close resemblance to lupus; no other concomitant, or anterior symptom of secondary syphilis; cure by the mercurial fume, &c.

J. L—, æt. 36, was admitted into the Queen's Hospital in March, 1851, with a foul ulceration affecting the upper lip, and also of the nose. The ulceration was not deep, nor were the edges thickened or sharp, but it was surrounded by a deep red areola; it had destroyed the central, and a portion of each lateral cartilage; and had burrowed deeply into the integument of the upper lip. The disease had commenced in the upper lip, in form of a red, hard spot, or pustule, which then broke and spread by ulceration; the ulcers had destroyed the alæ and central parts of the nose, and were covered with thick black crusts. This patient had suffered from several attacks of primary syphilis, but had never had any symptom of secondary syphilis, except the one now present.

[1] Manual of Diseases of the Skin, by Cazenave and Schedel, translated by Dr. Burgess, p. 257.

Many who saw this case considered it as lupus: it was admitted by the house-surgeon as a case of lupus. Without having any positive data to guide me, I believed it syphilitic, and consequently placed the patient on an anti-syphilitic treatment. The ulcer was poulticed to remove the crusts, and the ulcers were then dressed with a weak, black wash, and the fume of the iodide of mercury was used every morning. A change in the aspect of the sore was soon visible; and the patient was discharged under the month, with the ulcer quite healed by a good, firm, but red cicatrix.

The symptoms of secondary syphilis assume many varied forms, and sometimes affect internal organs, producing symptoms which closely simulate those which are reputed to belong to other diseases. I bring forward a case which forcibly illustrates this proposition.

Case XX.

Hoarseness, with relaxed throat, and loss of voice for three years; no benefit from ordinary treatment; subsequently an attack of tubercular syphilis; cure of the former symptoms by the treatment of the latter.

A barrister placed himself under my care to be treated for secondary syphilis. The symptoms consisted in the presence of a large round tubercle, covered by a patch of inflammation, in the substance of the left cheek. On the nates, and on the upper and back parts of the thigh, there had been also several of these tubercles, which had ulcerated, and become deep, irregular, foul, discharging ulcers, seated on an indurated base. He had suffered from primary sores seven years previously; and, three years ago, the throat had become painful on swallowing, was relaxed but never ulcerated, and the voice hoarse and feeble. For these symptoms he had consulted several physicians in London, and had used counter-irritation, local applications, and had been submitted to internal treatment of various kinds, with little or no benefit: as he got thin and weak, he began to fear threatenings of laryngeal phthisis. Seven months previous to my seeing the patient, the tubercles on the back and thigh appeared, which slowly increased, ulcerated, and ran into foul sores; the tubercle on the face had also recently made its appearance. For these symptoms, doubtless syphilitic, the patient placed himself under my care.

He was placed on the use of the mercurial vapour-bath, a milk diet, and the biniodide of mercury with the iodide of potassium. The tubercle on the face had disappeared after the sixth bath, and

the ulcers, which were dressed with the Ung. Hyd. Nit. Oxyd., and Unguent. Elemi, looked healthy, and were healing rapidly. In six weeks all the symptoms had disappeared; but what is remarkable, the hoarseness, and uneasy feelings in the throat, were gone, and they have never returned.

The symptoms in the throat and windpipe in the preceding case were doubtless syphilitic, which is evident from their disappearing under the treatment which was directed against the syphilitic tubercles; but from their occurring as isolated symptoms of secondary syphilis, in a form not common, their nature and origin were overlooked; the mischief in the larynx would have terminated in ulceration, had it not been checked in time.

Whilst on the one hand, symptoms due to secondary syphilis are constantly unsuspected as to their nature and origin; so on the other, are diseases reputed syphilitic, which certainly have no dependence upon the latter disease. This proposition is of immense importance in its practical application; patients who have once had any syphilitic taint, are apt to attribute the whole diseases of after life, of whatever nature they may be, to a syphilitic cause; and this apprehension or conviction is carried in many cases to such an extent that it is difficult or even impossible to combat it. A gentleman, upwards of sixty years of age, called on me one day, and showed me his hands and arms, which were covered with a well-marked eruption of "psoriasis guttata." I said to him, "You are come to ask me if this eruption is syphilitic, and I tell you at once, without asking a question, that it is not." He replied, "I am glad to hear you say so, and I feel persuaded that it is not, for the opinion you have expressed coincides with others that have been given me by some of the first surgeons and physicians, both in London and on the continent;" but, continued he, "I showed it to one person, in whom I really had no confidence, who said it possibly might be syphilitic. I must confess, that this opinion makes me uneasy, and I cannot get rid of the idea that it is just possible the disease may be venereal, for I had a sore before I was twenty, and this eruption, which I have had forty years, came on about that time, after bathing whilst I was very hot. My chief object in coming to you, is to beg that you will test the nature of the eruption by some anti-syphilitic remedy, which will set the matter at rest, till when I shall never be easy in mind on the subject." This is not an isolated case; these fears are widely spread in society,

and are sources of continual mental uneasiness, in some instances, threatening the minds of the patients, and even determining to acts of suicide.

In attempting to form a diagnosis in reference to the nature of a symptom supposed to be due to secondary syphilis, several points must be taken into consideration.

1. The nature and appearance of the symptom itself.

2. Its history, the date of its appearance; the character, date, and number of primary symptoms which preceded it.

3. The constitution of the patient, what diseases he may have been subject to, and whether any similar symptoms had ever been present prior to the contraction of any syphilitic taint by the patient himself.

4. If, apparently, an isolated symptom be present, other symptoms should be looked for, which may be generally found on close examination and inquiry.

5. If the patient be married, the health of his wife and children should be noted; and, lastly, we may resort to the test of treatment itself. By attention to these circumstances, I think it will generally be found, that we shall be able to make out, in most cases, a correct diagnosis of many secondary syphilitic symptoms, of whose nature we might remain in doubt, after a more cursory, or careless examination.

CHAPTER XVI.

OF THE PROGNOSIS OF CONSTITUTIONAL SYPHILIS.

THE prognosis of constitutional syphilis involves many grave questions, besides that of the effect of the disease on the health and life of the patient. It is true that constitutional syphilis rarely terminates fatally, considered in reference to the number who suffer from such disease; but yet where the pustular, or tubercular, or even other forms of disease occur in advanced years, the patient's life is not unfrequently shortened by the exhaustion produced by repeated outbreaks of disease. Where constitutional syphilis terminates fatally, organic changes are not uncommonly met with in the mucous membranes, especially in those of the intestines and larynx, where ulceration is found, and the patient sinks exhausted by diarrhœa, or symptoms resembling laryngeal phthisis; cough, with profuse expectoration, and night sweats. At other times the constitutional condition is one of profound cachexia, in which the changes most evident are rather in the humours than in the solid parts of the body. In addition to its direct influence, a syphilitic taint frequently becomes the means of developing latent mischief in various organs, especially in the lungs, and I have, in more than one instance, seen patients die, in the Queen's Hospital, of ordinary phthisis, whilst suffering from syphilitic diseases of the skin and bones.

The ordinary forms of constitutional syphilitic taint do not, however, terminate fatally; neither do they, in a great number of instances, appear to affect the general health of the patient; but a serious question, in reference to the prognosis of constitutional syphilis, is that which relates to its curability, and whether, and at what period, we are capable of pronouncing a patient cured after the disappearance of all external signs of a constitutional syphilitic taint. Some modern writers have denied the curability of constitutional syphilis altogether, and asserted that the virus "once received into the blood, remains there for years, and possibly, indeed

certainly, for the rest of existence."[1] Though there may be some foundation for such a statement, it is too sweeping to be received as an axiom. If secondary syphilis attack persons of good constitution, under thirty-five years of age, and be properly and perseveringly treated, I believe, in a great majority of instances, that the disease is eradicated, and I found my opinion in the fact, that many persons who have so suffered have never exhibited any further evidence of syphilitic taint, and their children have also enjoyed the best health. If, again, a constitutional taint make its first appearance over forty, especially in the forms of pustular or tubercular diseases of the skin; although treatment may do much in removing the symptoms of such diseases, it would, perhaps, be going far, to say that they are ever perfectly cured; and I am sure they rarely are, except vapour-bathing be associated with any treatment that may be adopted. This is our sheet anchor in the treatment of all forms of constitutional syphilis.

If, again, the symptoms of a syphilitic taint have disappeared from the system for years, the taint may remain latent, and appear in the offspring of such patients, in the various forms of hereditary or congenital syphilis. I could relate many cases of this nature, where, although no external sign betrayed the existence of a taint, still children have been born to such parents, who have exhibited formidable symptoms of syphilis.

Case XXI.

A gentleman married, having been free from the slightest appearance of syphilis for some years prior to his marriage. His lady aborted of her first infant, and also of the second; the third child was born alive, but at six weeks old was attacked with "snuffling," and condylomata round the anus; the eyes were also affected; the lady aborted of the fourth child; the fifth had condylomata and inflamed eyes, with snuffling; and the sixth exhibited the same symptoms soon after birth. The lady had also an ulcerated throat of suspicious appearance, but no other symptom.

Such cases might be multiplied; I have seen many: Mr. E. Wilson has also recorded some very remarkable ones. In the face of such facts, who can say when some patients are free from syphilitic taint, or who can deny the mode of infection by means of the blood, or the secretions.

[1] Erasmus Wilson; on Syphilis, &c., p. 158.

CHAPTER XVII.

OF THE STATE OF THE BLOOD IN CONSTITUTIONAL SYPHILIS.

If the blood taken from any part of the body of a patient in an advanced stage of constitutional syphilis be examined microscopically, it will be found to differ widely from healthy blood. The single corpuscles are small and pale, and their circumference often irregular; they are disposed to coalesce and run into irregular and confused masses, in which all trace of the individual corpuscle is lost. They are also very small in quantity, their number in proportion to the other elements being less numerous than in healthy blood. The blood of patients in this state is poor and thin; the corpuscles small or irregular, and much diminished in quantity. This has been termed "deglobulization" by some modern writers. The diminution of the relative quantity of blood-corpuscles in secondary syphilis is strongly contrasted with the condition of the same fluid in the acute primary forms of the disease, where the globules are full and large, and their number relatively increased.

M. Grassi[1] states that in the advanced stages of the disease the globule is converted into albumen. It is certain that many forms of constitutional syphilis are accompanied by albuminuria. I have seen many cases, and have at the present moment one under my care. M. Waller has succeeded in inoculating with the blood of a patient labouring under constitutional syphilis.[2] MM. Diday and Vidal de Cassis also believe in the contagious properties of blood thus affected.[3]

Of course the conditions of the blood I have just alluded to will present infinite varieties, dependent on the age and constitution of the patient and the length of time the disease has been in the system. My observations have been made at all ages; but the de-

[1] Gazette Médicale, 1850, p. 200.
[2] Op. cit.
[3] See Vidal de Cassis; op. cit., p. 238, &c.

scriptions I have now given have been taken from the blood of patients upwards of forty years of age, where the disease had existed some years.

The blood-disc taken from patients debilitated and exhausted by an old venereal taint does not long retain its characteristic shape. It is well known that the healthy blood-disc, dried on a piece of glass, retains its shape and character for a length of time, and may be preserved in this way for the purposes of demonstration; but the blood-disc of constitutional syphilis, if examined a few days after being drawn from the patient, has completely disappeared, and nothing but a red cloud is perceived, produced by the dissolution of the disc, and showing the profound alteration the blood undergoes in advanced stages of the disease.

CHAPTER XVIII.

OF THE PARTICULAR SYMPTOMS OF CONSTITUTIONAL SYPHILIS. OF SYPHILITIC DISEASES OF THE SKIN.

SYPHILITIC diseases of the skin may be referred to nine principal groups: 1, Exanthemata; 2, Squamæ; 3, Vesiculæ; 4, Pustulæ; 5, Papulæ; 6, Tubercula; 7, Ulcers of various kinds and in various situations; many the consequences or necessary result of many of the preceding forms; 8, Vegetations, warts, condylomata, or mucous tubercles; and 9, Maculæ, or syphilitic stains of the skin.

OF THE SYPHILITIC EXANTHEMATA.[1]

The syphilitic exanthemata generally make their appearance under the form of irregular patches, of a shining copper or bronze colour, at the onset of the disease: if there be much accompanying fever they are more inclined to redness, and the bronze or copper colour is not marked till the inflammation and fever have disappeared. Occasionally this form of disease commences in red patches, spread more or less extensively over the body: these patches vary in dimensions from the size of a sixpence to that of a shilling; they are not elevated and solid like the papulæ, and have no apex or centre containing either lymph or pus. They are commonly accompanied by fever, and but for the coexistence or immediate precedence of primary sores might be mistaken for an eruption dependent upon other causes. They very commonly appear before the primary symptoms have disappeared. When they are dying the top is commonly covered with a thin dry scurf or scale. They are sometimes accompanied by papulæ and other forms of constitutional syphilis, as superficial redness or ulceration of the fauces, and are frequently succeeded by the squamous or tuberculous forms of disease. These eruptions frequently accompany the primary forms of syphilis.

[1] *Synonyms and Varieties.*—Roseola Syphilitica, and papulous erythema. (Cazenave; on the Syphilida, p. 226.)

They demand, in the first instance, if there be much symptomatic fever, an antiphlogistic treatment, and the warm bath; afterwards, if they are rebellious, the iodide, biniodide, or bichloride of mercury, with sudorifics and the mercurial vapour bath. This is the form of skin disease which frequently accompanies an acute gonorrhœa, or comes on when it has been suddenly suppressed in its early stages by injection. The ordinary forms of roseola generally occur early in the history of a venereal taint; but there are cases where eruptions which belong to the exanthematic form are chronic, and appear at varied intervals after primary diseases. I have seen cases where they occurred two years after, and ten years after the primary disease. In these instances, the affection of the skin consisted of circular red patches, fading into a brown colour, and covered with a thin, dry scurf, not a scale. After a long period, in some of the spots, the scurf became a scale, and gradually thickened, so as almost to appear like lepra or psoriasis, diseases from which it is, however, essentially different.

These spots of chronic roseola, at first red, gradually fade into a pale, shining copper colour, and frequently, at last, die away into a yellow stain of the skin, which remains for a long period of time, and sometimes cannot be removed at all.

The treatment, which is almost always successful in these cases, consists of a milk diet, minute doses of the bichloride or biniodide of mercury, not exceeding the twentieth of a grain for a dose, and the mercurial vapour-bath three times a week.

OF THE SYPHILITIC SQUAMÆ.

The squamæ are particles of thickened epidermis, become hard dull, and opake, and elevated above the surrounding skin by a morbid condition of the subjacent dermis, or simply of the rete mucosum. This disease is essentially chronic, and does not generally succeed to any febrile condition of the economy. The syphilitic squamæ generally appear in the form of patches, more or less diffused, varying from the size of a sixpence to that of a half-crown; the centre of these patches is frequently depressed; they are of a red copper colour, changing ultimately to a dull brown, or even black, which is a long time in disappearing. I apply the term squamous, or scaly syphilitic disease of the skin, to that form which is scaly from the commencement: it is to be distinguished from other diseases, such as roseola, papules, or pustules, which either become covered with a dry dandriff, as roseola, a slight ulcer with a

scab, as papules on the decline, or a crust which covers a ruptured pustule; these are not scaly diseases, properly so called, and the distinction should be well made, as the scaly disease is that which has been called "true syphilis," although it is not more truly syphilitic than a pustule or a tubercle, and not half so formidable in its consequences or results.

The scaly syphilitic eruption consists of thick, dry scales, adhering firmly to the skin, and resting upon a red, elevated surface, the scales being continually renewed when shed: those portions of the skin on which the scales are placed, present a well-marked thickening, and are thicker as the disease has been longer in existence.

The scaly disease appears under various forms; as a ring, a spot, (guttata,) an irregular ring, like the track of a snail, (gyrata,) sometimes the scales are black, at other times of a shiny or pearl-like whiteness, and sometimes, when affecting the palms of the hands, as thick as horn in old cases.

Scaly syphilitic eruptions may be confounded with other scaly diseases of the skin not syphilitic, as the ordinary forms of lepra, or psoriasis; they may be confounded, again, with other syphilitic eruptions, which assume an appearance of scaliness on their decline; some forms of papules (lichen,) when the papules are large, resemble it very closely. On the hands the disease may be mistaken for grocers' or bakers' itch; and this is not unlikely, as the horny or scaly syphilis of the palms of the hands, and joints of the fingers, very commonly occurs as an isolated symptom of constitutional syphilis.

Scaly diseases occur at various periods after primary infection, sometimes as early as three months, in other cases much later; there is no rule on this point. They sometimes succeed to other forms of skin disease, as papules, or vesicles, and frequently occur again under the same form when they have been apparently cured, a fact peculiar to the scaly disease, for papules, vesicles or pustules, rarely occur twice; if another attack of skin disease succeeds it is generally, if not always, under another form.

The syphilitic squamæ have a tendency to excoriate, or ulcerate slightly in the centre, which then becomes covered by a small, dry, thick crust; occasionally, also, their surface is traversed by fissures, when there does not exist any apparent ulceration. After the cure of the disease, the dermis remains depressed in the parts corresponding to the centre of the squamous patches. The other symp-

toms of constitutional syphilis, with which the squamæ are commonly associated, are inflammations and ulcerations of the fauces and palate, and pains and diseases of the periosteum and bones.

As the syphilitic squamæ are not generally accompanied by vascular excitement or fever, an antiphlogistic treatment is rarely indicated. Sudorifics, as the decoction of sarsaparilla, or the preparations of Zittman or Feltz, with the carbonate of ammonia, and the mercurial vapour-bath, are generally successful. The bichloride or biniodide of mercury, or frictions, are the best remedies when mercurials are indicated. The preparations of arsenic are useful in some forms of disease, particularly those which succeed to primary diseases which have been fully treated by mercury. Biett relates a case of this character speedily cured by the liquor arsenicalis, and the arseniate of soda, after the failure of other measures. Over true scaly diseases the iodides have very little influence.

OF THE SYPHILITIC VESICULÆ.

The vesiculæ are the most rare of all the syphilida. M. Biett has only seen a few examples of it. Cazenave says that he published the first account in 1828. The disease is characterized by vesicles seated upon an inflamed base, of a deep copper-coloured red; they are indolent, and remain stationary much longer than eruptions of the same character, not having a venereal origin. Some of them shrink up, and are transformed into gray squamous crusts; others disappear and leave behind them on the skin where they are situated, a brown mark. They are accompanied by some degree of fever, inflammation of the fauces and palate, and other symptoms of secondary syphilis. I have seen several examples of this form of secondary venereal disease of the skin, which is not, perhaps, so rare as might at first be imagined, as the vesicles soon rupture, shrink, and are transformed into little crusts or scabs, which look like lichen or lepra. An error in diagnosis might be very easily committed, both as regards the form of syphilitic eruption, and as to the nature of the eruption itself, whether syphilitic or not, especially if there be no other concomitant symptom of secondary syphilis.

The syphilitic vesiculæ are commonly preceded by other forms of skin disease, which they replace. I have seen the vesicle preceded by roseola, and replaced by a pure scaly disease; thus corroborating a former remark, that with the exception of scaly diseases, the syphilida are seldom reproduced under the same form.

Vesicles on the penis, whether venereal or not, sometimes accompany primary diseases. I have seen one case in which, three days after the appearance of a gonorrhœa, the skin of the penis was covered with a crop of vesicles, from which the patient had never suffered before. Cazenave (p. 266) believes these symptoms to be syphilitic. Vidal de Cassis states that he has succeeded in inoculating the syphilitic vesicle, by which inoculation a similar disease was produced, (p. 343.)

OF THE SYPHILITIC PUSTULÆ.

Pustules are characterized by an elevation of the epidermis, raised by a collection of pus secreted by a circumscribed portion of inflamed skin. The syphilitic pustulæ are frequently complicated with tubercles, and the pustules themselves commonly placed upon a tuberculous base. The pustules are again occasionally associated with papulæ, but are rarely complicated either with squamous or exanthematous affections. The syphilitic pustulæ frequently ulcerate, and give place to a sore of characteristic appearance, with hard and elevated edges, and a foul surface, secreting a sanious pus. Unlike other pustular diseases of the skin, the syphilitic pustule follows no regular course; they are developed slowly, and remain stationary for a longer or shorter period, frequently for many weeks, or till an appropriate treatment be adopted. They are situated upon a hard, raised base, of a deep brown or copper red: this colour is better marked when they have continued some time, than in the commencement of disease. The syphilitic pustulæ strictly belong to that class of affections which are termed secondary, but are sometimes observed to coexist with a primary venereal sore: they are, under these circumstances, developed upon the skin of the penis, the scrotum, the pubes, or the labia: they are placed upon a red, indurated base, soon burst, and change into foul and spreading ulcers.

Pustular syphilis is characterized by the eruption of pustules of various sizes, over a greater or less extent of the whole surface of the body, rarely accompanied by any symptomatic fever. It is sometimes confounded with other forms of skin disease, not venereal. On the face I have known it mistaken for acne, especially when the pustules are small, and I have also in more than one instance seen it mistaken for smallpox. Pustular secondary syphilis assumes several forms; in one form the pustules are small and numerous: this has been termed the lenticular or miliary pustule; in a second form the pustules are larger and not so numerous,

and in the third form we have large single pustules, irregularly disposed, but not numerous: the patient may have from ten to twenty of these pustules, in different stages, on various parts of the body. The secondary syphilitic pustule is a very common form of constitutional syphilis. It generally occurs from six to twelve months after the primary poisoning, but I have seen cases, one now in the hospital, where a well-marked pustular eruption occurred before the primary sore was healed; and again, I have known well-authenticated cases, where pustular syphilis has occurred ten, twelve, twenty-seven, and thirty years after a primary infection. It is difficult to explain these facts, which I state from my own experience, and in which I am borne out by M. Cazenave:[1] of their truth there can be no doubt.

The syphilitic pustule runs a very marked and peculiar course, and I will take a medium-sized pustule for the purpose of illustrating the history of this course, because the progress I am about to mention is not so well marked either in a very small pustule, or a very large one. When the syphilitic pustule first appears on the skin, it consists of a portion of epidermis raised by a small quantity of pus; but the disease remains a very short time in this state, sometimes only a few hours, at most not more than a few days; the pustule becomes ruptured, the pus exudes on the surface of the pustule, which shrinks and dries up.

In the first form, (the lenticular,) the pustules commence in small, red, elevated spots, spread more or less over the face, trunk, and extremities; these spots suppurate at the apex, and each spot contains a drop of matter about the size of a large pin's head; the pustule soon breaks, the pus exudes and dries on the surface of the pustule, each of which is then covered with a small crust, slightly depressed in the centre. On the face these pustules very much resemble "acne."

In the second form the pustules are larger, about the size of a pea, or the smallpox pustule; these soon break and become covered with a thin, flat, or conical crust: if the pustules are few and isolated, the crusts are circular, but if near together the crusts run into each other and assume an irregular form. The disease, in this stage, has been denominated "pustulo-crustaceous." We may see the pustule before it has broken, surrounded by a narrow, red, or livid areola, or the circular crust where the pustule has ruptured, and

[1] Traité des Syphilides.

the pus dried up, or confluent and irregular where the pustules have been near together.

The crust covers an ulcer which, when the former is detached, may be found in varied conditions, either healthy and disposed to heal, deep and sloughy with indurated edges, or even phagedenic. These are secondary venereal ulcers, succeeding to the rupture of the pustule. The ulcer may heal under the crust of the pustule, which is a very common circumstance, but when it does so it leaves behind it a red cicatrix always more or less depressed in the substance of the skin. If the pustule have been placed on the forehead, and have been large and long in existence, the surface of the bone is always more or less absorbed, and a well-marked depression exists in it, long after the ulcer has healed, and the skin has recovered its natural appearance. Till a proper treatment has been adopted, the venereal pustule keeps constantly forming on the skin for long periods, and thus we commonly see the pustule, the crust, the ulcer, and the depressed and red cicatrix all present in the skin at the same time, giving the malady the appearance of a compound skin disease.

In pustular secondary syphilis, then, we have four distinct forms of local mischief—the pustule, the crust, the ulcer, and the depressed and coloured cicatrix, and in the advanced stages of the disease it almost invariably happens that all these conditions are present on the skin at the same time. In many forms of pustular syphilis, particularly the first two, the constitutional disturbance is not so great as the extent of the local malady would lead us to expect; thus in many cases the general health is little disturbed. But there are other instances in which the constitutional disturbance is so great as to put the life of the patient in imminent danger. All the forms of pustular constitutional syphilis are formidable diseases, and indicate a profound and complete contamination of the system by the syphilitic virus. In the second and third forms, the general health suffers more or less, and a fatal termination may ensue, in which a general breaking up of the constitution takes place, preceded by diarrhœa and profuse night perspirations. Happily, however, under a proper treatment, this is not often the case.

Pustular syphilis is formidable again, from the marks and depressions left on the skin, and on the surfaces of the flat bones by the cicatrices of the ulcers to which it gives rise, which may be frequently avoided if the patient is treated early and before the rupture of the pustule: it is commonly the forerunner of, if it be not

accompanied by, tubercles and diseases of the bones. Pains in the bones, nodes, and periostoses, commonly complicate pustular syphilis, particularly where the pustules are simple and large. It must be quite evident that the stages of pustular syphilis are so numerous, its complications and pathology so varied, and the conditions of the general health under which it is met with, so different, that no specific treatment can be in any way applicable to pustular syphilis considered as a mere secondary venereal disease. It must be quite clear that the treatment of the miliary or impetigenous pustule in a patient in good health, must totally differ from that we should adopt in one suffering from ecthyma, where the habit is weak and the health bad, and yet they are both pustular secondary syphilis.

If a patient be presented for treatment, suffering from either the first or second form of pustular syphilis, and the health be good and the disease recent, the following plan of treatment should be followed:—He should first have a smart aperient exhibited, and be placed, not upon a low diet exactly, but upon a diet consisting of cocoa, milk, broth, and farinaceous matters generally; no beer, wine, spirits, or animal food; if the latter be permitted it should be taken very sparingly. Much difference of opinion exists with regard to diet in secondary syphilis, but on this point it appears to me that the diet, like the medical treatment, must be varied to suit the circumstances of the case. Of one thing I am certain, that should a patient upwards of forty become tainted with secondary syphilis, and such patient has been in the habit of constantly living well, a low diet must be adopted with great caution. Age and habit have a vast influence over secondary syphilis, and modify the course and treatment of both very materially.

Where the health is not impaired, the disease recent, and the patient not more than thirty or thirty-five years of age, the following is an outline of the best plan of treatment:

1st. An aperient.

2d. The diet already indicated.

3d. Decoctions of the woods, with antimonials.

4th. The ordinary vapour or hot-bath three times a week. The vapour, however, is far superior to the water-bath. This treatment to be pursued for a week. At the end of that time the plan should be somewhat modified.

The diet should be the same, a little better, if the patient feels the change in his habits much. A tenth or twelfth of a grain of

the biniodide of mercury given in solution in water, with from three to five grains of the iodide of potassium. The vapour is to be changed for the moist mercurial fume, on the plan I have suggested. This should be used three times a week. If the mercurial plan thus laid down be well and carefully regulated and arranged, no salivation or ulceration of the mouth, or any of the more common and evil effects of mercury, will be produced. A mere redness, with slight swelling and elevation of the gums, is all we shall observe, and this is enough for our purpose.

The biniodide of mercury, with the iodide of potass, may be discontinued for two days in every eight or ten, and an aperient again given.

If this plan be carefully pursued, a beneficial change is soon observed in the condition of our patient. In the first place, after two or three days' treatment we perceive that no more pustules appear, that the disposition to their formation is for the time arrested; again, the red or copper coloured ring round the pustules that are covered with crusts, looks less livid, and the eruption looks more dead: after a time the crusts begin to drop off, and we find that in many places, where they formed the covering to ulcers, that these ulcers have healed, and that there is a red cicatrix only, marking the site of the previously existing ulcer. This cicatrix, very commonly, is depressed more or less in the skin, forming a pit not unlike that left by the pustules of smallpox. The crust is the best dressing to the ulcers underneath, under ordinary circumstances, and this is proved by the crusts adhering till the ulcer has healed, under a proper constitutional treatment, and then falling off. If, however, the ulcers are unhealthy, and disposed to spread, we find drops of pus exuding through the crust, or the crust falls, leaving the sore underneath in very various conditions. To these sores various applications may be used. I generally poultice them if foul, for a day or two, then wash them with a little black wash, and cover them with collodion, or the solution of gutta-percha in chloroform, suggested by Dr. Graves, of Dublin. If they secrete much, they may be dusted with starch and calomel: ointments are generally unsuited to these ulcers, and under ordinary conditions the collodion, or gutta-percha dressing, to defend them from friction and atmospheric influence, answers very well.

This plan should be followed for a month or six weeks, and at the end of that time we shall find that the symptoms of pustular

syphilis have disappeared, with the exception, probably, of the red stains left on the site of the ulcers. If they have been deep, it is some time before this redness altogether subsides, perhaps two months, or even three, or more, according to the severity of the attack. Treatment should not be given up, although it should be modified, till all the redness left on the skin has disappeared. If the destruction of parts by the ulceration has been great, the skin is far from presenting its original healthy appearance; it remains puckered, and uneven in places, resembling the appearance of the cicatrices produced by a burn.

CASE XXII.

S. R. was admitted into the Queen's Hospital, on March 30, 1849, with twenty-eight or thirty large pustules, in various stages, on different parts of the body; constituting the disease known as syphilitic "ecthyma." In this patient the constitution had been nearly destroyed by the irritation of the disease. When admitted, he presented an illustration of the last stage of syphilitic cachexia. He could not stand, the extremities were œdematous, night perspirations profuse, and pain in the bones of the head and legs very severe. There were seven or eight large secondary ulcers, of foul character, on the head, arms, and legs, which had resulted from the rupture of the pustules, and in two places were pustules recently formed, which offered a good illustration of their commencement. The epidermis was raised by a purulent collection, of the size of a shilling, the covering of which was very thin, the pustule itself surrounded by a deep livid-coloured areola; the skin on which the pustule rested was not indurated. This patient took at first large doses of opium, an admirable anti-syphilitic in such states. I have employed opium very largely in the advanced stages of constitutional syphilitic diseases. Opium has, by a number of authorities, been extolled as a remedy of great value in many forms of secondary syphilis, and its administration by some surgeons has been carried to the extent of twenty or thirty grains a day. Opium is indicated where the health has been broken by mercury and syphilis, and its administration is almost always followed by satisfactory results. It is of especial use where the nights are bad, and the patient emaciated and feeble, where a general irritability, the result of mercury and disease, appears to be wearing the patient out. In such cases opium, in large doses, acts almost magically. In many in-

stances it may be advantageously combined with other remedies, to suit the exigencies of any particular case. I am in the habit of prescribing it combined with guaiacum, with very good results.

Opium, the warm-bath, appropriate dressings to the secondary ulcers produced by the rupture of the pustules, with beef-tea, and decoctions of the woods, are the first remedies to be employed in such states as those to which I have just alluded. As the patient improves, the mercurial vapour-bath must be used, and the iodide of iron given. There may be many other syphilitic symptoms present, with the pustular disease of the skin and its consequences. Pustules are commonly complicated with tubercles, tophi, and almost always in advanced forms, with pains or diseases in the bones. Such states, of course, require modifications in the treatment suited to the exigencies of each particular case.

OF THE SYPHILITIC PAPULÆ.

The papulæ are small, solid, hard elevations upon the skin, containing neither lymph nor pus, surrounded by a small inflamed areola, having frequently ulcerations at their apices, which then become covered with small, dry incrustations. The syphilitic papulæ are more or less disseminated over the body, arranged in groups, or disposed to be confluent. They are distinguished by their deep red, or copper colour, their tendency to ulcerate, and to form hard incrustations on their surfaces, which, falling off when the ulcer has healed, leave brown, copper-coloured, depressed cicatrices in the skin. The papulæ are commonly associated with pustules, tubercles, or squamæ; and are almost always accompanied by syphilitic iritis, ulcers of the mouth and fauces, diseases of the bones, or periosteum, nocturnal pains, or other symptoms of confirmed constitutional syphilis. This affection of the skin sometimes accompanies primary symptoms; when it does so, it assumes a more or less acute form, and is attended with some fever.

This variety of disease has been termed venereal itch, "scabies venerea," on account of the irritation the papulæ occasion when they are seated on certain parts of the body. It sometimes attacks the labia, principally on their external surface, the orifice of the vagina, and the clitoris, which parts, on examination, are found covered with small papulæ of a deep red colour, causing an intolerable itching, principally in the night: the eruption sometimes extends to the arms and internal parts of the thighs. Mercurial ointment generally allays the irritation.

If the papulæ assume an acute, or subacute form, they must be treated, at first, on the antiphlogistic plan, and a regulated diet must be observed. Should they succeed to primary symptoms, which have not been treated by mercury, this remedy may be employed: fumigations have a marked effect in allaying the irritation by which they are accompanied; weak solutions of the bichloride of mercury may likewise be used, to sponge the surface of the skin affected with syphilitic papulæ. The mercurial vapour bath is also of essential service.

OF THE SYPHILITIC TUBERCULA.

Syphilitic tubercles of the skin are deep-seated, solid, circumscribed elevations, containing neither lymph nor pus; they differ from the papulæ in their size, being much larger, more prominent, and better defined. Syphilitic tubercles are either isolated or grouped, of a shining red, livid, or brown colour, surrounded by an areola of a dark red or coppery appearance. These tubercles are prone to ulcerate, and form excavated sores with thick and elevated edges, and a foul surface, secreting an offensive pus, which, drying up, is transformed into gray or dark coloured scabs or crusts. The syphilitic tubercle forms the link of connexion between the secondary and tertiary symptoms of M. Ricord: it is the first of that class of syphilitic diseases, in which the virus appears to have penetrated more deeply into the economy, and to have produced a disorganization in tissues, which those forms hitherto considered have left untouched.

The flat tubercle of M. Cullerier, or the tuberculous pustule of Alibert, sometimes occurs as a primitive affection, but more commonly as a symptom of constitutional syphilis: in the former instance it is observed on the scrotum, the labia, the vicinity of the anus, or the mammæ. The surface of these tubercles is smooth and flat, or granulated, of a deep red or copper colour, varying from the size of a sixpence to that of a shilling: they are not so much disposed to ulcerate as the other varieties.

The more common forms of tubercle are conical, or round elevations, dispersed here and there over the skin, or assembled in groups or clusters, which are also irregularly distributed. The size of these varies from that of a pea to that of a large hazel nut, or filbert; they are more commonly situated on the anterior surface of the chest, or the abdomen, on the neck, the face, or the internal part of the arms.

Another variety of tubercle is situated, more commonly, on the alæ or lobule of the nose, or on the forehead; frequently, also, upon the neck of the uterus, or upon the tongue, where they may be mistaken for cancerous affections. These tubercles are commonly assembled in circular groups of variable size; they are so prone to ulcerate, that this termination appears to be one of their natural characters: when in this condition, they are frequently described under the name of syphilitic lupus. The tubercular syphilida are commonly complicated with a scrofulous, scorbutic, or herpetic tendency, or diathesis: their progress is slow, and generally without pain; they gradually increase in size till they terminate in softening or ulceration. They are the most formidable of all the forms of constitutional syphilis, producing great deformity in all the parts invaded by ulceration.

Whilst the tubercles are in a state of induration, and as yet neither ulcerated nor softened, their resolution may be attempted. For this purpose, the iodide of mercury, with the iodide of potassium, may be employed: it must be remembered, however, before any plan of treatment is framed, that due attention be paid to the general health of the patient.

If there be no contra-indication, the treatment may be commenced by administering a pill of the iodide of mercury daily, containing one grain of the salt and a solution of the iodide of potassium, at first administered in doses of ten grains in the day. On the fifth day, two pills are given, and the quantity of the iodide of potassium is increased: it is generally unnecessary to carry the dose of mercury to any extent, or to continue its use very long; the treatment is to be completed by the iodide of potassium. The indurated tubercle is commonly resolved by this treatment, leaving behind it, in the skin, merely a depression of a brown or copper colour, more or less deep.

The mercurial vapour bath is also exceedingly useful, whilst the tubercles are yet unsoftened, in procuring their resolution: it may be employed with the iodide of potassium and sarsaparilla.

As syphilitic tubercles are accompanied by a process of inflammation, under the increase of which they soften and ulcerate, a local treatment, whilst they are in a state of induration, is of vast service in assisting the internal treatment in their resolution. For this purpose, cooling lotions may be employed, or fomentations of poppy, henbane, or aqueous solutions of opium.

When the inflammation is subdued, and the tubercles are indo-

lent, folds of linen soaked in a weak solution of the bichloride,[1] or frictions with mercurial honey,[2] or the ointment of the iodide should be used. They may also be sponged with a lotion composed of the solution of chloride of lime, and afterwards rubbed with an ointment made of calomel, or calomel and opium. Ricord gives one golden rule here, which, in attempting to resolve the tubercular syphilide, we should bear constantly in mind: that, as long as inflammation exists, a local antiphlogistic treatment should be pursued, whatever, according to the constitution of the patient, the internal treatment may be. The local applications above indicated are only to be employed in a perfectly indolent condition of the disease.

In the ulcerated forms of tubercles, all that has been said on the treatment of primary venereal sores may be referred to with advantage, since these secondary ulcerations require nearly the same local treatment—the use of the nitrate of silver, the aromatic wine, with astringents, sedatives, narcotics, or digestive ointments, or a local antiphlogistic treatment, according to the aspect of the sore. When caustics are indicated, the surface of the ulcers may be touched with the acid nitrate of mercury: this is a favourite remedy at St. Louis, and the ulcers cicatrize rapidly under its application: the separation of the crusts or eschars may be facilitated by the warm or mercurial vapour bath.

The iodide of potassium, with decoctions of the woods, are excellent remedies during the ulcerated stages of tubercle: mercurials also may be used in certain states, particularly if the primary disease have not been treated by mercury: the iodide, the biniodide, and the bichloride, with sarsaparilla and cinchona, are the best remedies. The decoctions of Feltz or Zittman, the liquor arsenicalis, or the arseniate of soda, are also remedies which, in particular cases, may be employed with advantage. If the disease do not appear to amend under the use of one remedy, another should be resorted to, and in this manner it will sometimes be found necessary to try several before one is discovered suited to the constitution of the patient. Sometimes the preparations of arsenic succeed when all the rest have failed; occasionally one form of mercurial

[1] ℞. Decocti altheæ officinalis, Oj;
Hydrargyri bichlorid., gr. xviij. M. (Biett.)

[2] MERCURIAL HONEY.
℞. Hydrargyri chlorid., ʒj;
Mellis opt., ʒj. M.

when another has been unsuccessful. There are cases, happily rare ones, in which all medicines appear useless: it is better, under these circumstances, to omit them altogether for a time, to remove the patient to a fresh atmosphere, to watch his general health carefully, and then again to resume the treatment, after the lapse of a longer or shorter period.

OF SYPHILITIC STAINS OF THE SKIN.[1]

The various forms of syphilitic diseases of the skin which I have just described, are frequently followed or accompanied by alterations of its colour, without any other pathological change. These stains are generally circular in form, and either distinct, single, and round, or placed in groups, or clusters; or, again, consisting of a mere mottled appearance. They vary in colour, from a deep brown to a bright, or a dirty yellow, and in places the skin appears as though it had not been washed clean. These spots sometimes appear on the site of previously existing diseases of the skin, or on parts which have never been affected. They do not disappear under pressure with the finger, they give rise to no irritation, and never ulcerate, or terminate in vesicle, papule, or pustule; they consist simply in an alteration of the colour of the pigment. They commonly last for years, or through the whole of life. I have succeeded in curing some forms by the mercurial vapour bath, but I have seen others which have resisted all modes of treatment. The general health is rarely disturbed in the majority of cases.

OF CONSTITUTIONAL OR SECONDARY VENEREAL ULCERS.

Secondary venereal ulcers are most commonly a consequence of other diseases of the skin, which have immediately preceded them: thus, the ruptured vesicle, or pustule, or the softened tubercle, naturally produces an ulcer: there are, however, some rare forms of secondary ulceration which are not preceded by any of the diseases I have mentioned, or, in fact, by any apparent disease. The sites of primary sores not unfrequently become the seat of secondary ulcers, which appear long after the healing of the primary sores, and which are doubtless due to a constitutional taint. M. Cazenave mentions some very curious examples of this nature, where an ac-

[1] Synonyms. Maculæ syphiliticæ—Taches.

cident, a wound, the application of a blister, or a relay of leeches, have been succeeded by constitutional syphilitic ulcers, and where no other evidence of a constitutional taint could be discovered. Mr. Paget, ("Lectures on Surgical Pathology," vol. 1, p. 492,) mentions a case where a gentleman who, for not less than five years after a syphilitic affection of the testicle, had no sign of syphilis, except that of general feeble health; but he accidentally struck his nose severely, and at once a well-marked syphilitic disease of its bones ensued. In another case, syphilitic disease of the skull followed an injury of the head.

I have already alluded to the operation of this law of proximate causes, in the development of secondary syphilis, when speaking of the syphilidæ generally.

CHAPTER XIX.

OF SYPHILITIC TUMOURS OF THE SKIN, AND THE SUBCUTANEOUS CELLULAR TISSUE.[1]

ISOLATED, hard swellings, varying in size from a horse bean to a swan's egg, form on different parts of the skin in the advanced stages of many forms of constitutional syphilis. These swellings are at first moveable, and the skin covering them not altered in appearance. In the advanced stages the tumour becomes adherent to the integument covering it, which inflames and ulcerates in one or more places, giving vent to the contents of the tumour, which softens, and suppurates, discharges an offensive sanies, or quantities of brown or black sloughs: the ulceration spreads till the whole skin covering the tumour is destroyed: we have then a deep foul ulcer, filled with a black slough, and sometimes an inch or two deep, the skin surrounding which is of a livid red colour, and the edges ragged, everted and hard.

These tumours, unlike the ordinary syphilitic tubercle, which in many respects they very much resemble, appear rather to spring from the subcutaneous cellular tissue, than from the skin itself; for it is not till the more advanced periods of the disease that the skin is involved: they generally appear on the extremities. I have seen these tumours on the fore-arm, the external condyle of the humerus, on the inner part of the leg, on the external hamstring, and other parts of the upper and lower limbs; they are rarely placed on the face, or the trunk, though occasionally met with in these situations. They may be confounded with the ordinary syphilitic tubercle, or when occurring as an isolated symptom, (which they rarely do,) with tumours arising from other causes, or even with common phlegmon, or chronic abscesses, particularly those of a strumous character; the diagnosis in such cases is important, as

[1] Tumeurs gommeuses.

the syphilitic tumour, when softening, or in that stage which resembles a common abscess, should never be opened or punctured.

The syphilitic tumour occurs late in the history of a syphilitic taint, and generally many years after its primary cause: it has generally been preceded, at no long period, by other symptoms which render its nature certain. It is also frequently associated with pains, or diseases of the bones, pustules, tubercles, or secondary venereal ulcers, which have succeeded to the detachment of the crusts of ruptured pustules or ulcerated tubercles. In its earlier stages, the resolution of this tumour should always be attempted, and this may generally be accomplished by appropriate treatment, if the process of softening have not proceeded too far. If the tumour be seen in its earlier stages, before the skin has become implicated, local treatment is of essential service: the most efficient remedies are blisters, frequently repeated, and dressed with mercurial ointment, or the compound iodine ointment; next in efficiency is pressure by means of discutient plasters, composed of belladonna, iodine, or mercury. The Emplast. de Vigo, with mercury, also answers very well. Some writers have recommended extirpation with the knife,[1] an absurdity too great to require a serious refutation. The internal treatment should consist of the administration of the iodides of mercury, potass, or iron, either alone or in a state of combination: the mercurial vapour bath also assists powerfully in the resolution of the tumour; it should be used twice or three times in the week.

If the skin covering the tumour has become thin, and is of a deep red or livid colour, we shall hardly succeed in dispersing the tumour: in this diseased integument one or two small spots of ulceration soon appear, which spread rapidly till the whole covering of the tumour is destroyed. When this is the case, we have to deal with a secondary syphilitic ulcer, frequently of very formidable character, which has penetrated sometimes to a very great depth in the soft parts, having destroyed the fascia, and laid bare the muscles if situated on the soft parts of the extremities, or if over bones, having produced caries, necrosis, or absorption of the bony tissue to a greater or less depth. In such cases, the constitutional treatment is still our chief reliance; but the local aspect of the sore will require a treatment suited to its varied aspects: should it become phagedenic, which it sometimes does, it must be

[1] See Vidal de Cassis, p. 446.

treated on the principles laid down in the chapter on that subject. Generally, after the surface has become clean, black wash, weak lotions of dilute nitric acid, or of creasote, in the proportion of twenty minims to the half-pint, answer very well, and better than ointments, although the latter are sometimes serviceable:[1] these ulcerations require, from time to time, superficial cauterization with the nitrate of silver, or the acid nitrate of mercury.

[1] ℞. Unguent. hydrarg. nitratis, ℥ss;
Ung. zinci, ℥iss. M. Or,
℞. Ung. hyd. nit. oxyd., ℥ss;
Ung. elemi, ℥iss. M.

CHAPTER XX.

ON SYPHILITIC AFFECTIONS OF THE APPENDAGES OF THE SKIN.

ALOPECIA.—LOSS OF THE HAIR FROM SYPHILITIC CAUSES.

It not unfrequently happens, that whilst other symptoms of constitutional syphilis are present in the system, the hair of the head becomes thin and falls off rapidly, and so slight is its adhesion to the scalp, that it comes off in large quantities when the hand is merely passed through it: this loss of hair is not confined to the head, it affects the whiskers, the beard, the eye-brows, eye-lashes, and even the hair on other parts. The loss of hair rarely occurs as an isolated symptom of constitutional syphilis; it has generally been preceded, or is even accompanied by superficial ulceration, or redness of the fauces, or pharynx, or those forms of skin disease which are seated in the epidermis or superficial layers of the dermis: it rarely accompanies tubercular or pustular affections. Even when the hair does not fall off, patients suffering from a constitutional venereal taint are subject to a constant formation of scurf on the scalp, which is doubtless due to syphilitic disease: cracks, fissures, and loss of the nails, considered in the next section, are almost always associated with loss of the hair.

I believe that when the hair comes off from causes which are due to syphilis alone, that it is almost always restored under an appropriate treatment. The constitutional treatment required for syphilitic alopecia is that which is indicated for the other symptoms with which it may be associated. Local treatment is here very important. The best remedy for restoring the hair quickly, and preventing its becoming weak, is, no doubt, shaving the head, and repeating this operation two or three times, rubbing well into the scalp, at the same time, one of the preparations about to be mentioned. Pomades, containing various preparations of mercury, or lotions or liniments with cantharides, are the chief remedies to be relied on in the restoration of the hair lost from syphilitic causes.

℞. Hydrargyri iodidi, ʒj;
Adipis prep., ʒiij. M. ft. unguent.

A small portion to be well rubbed into the hair every night, and washed out in the morning, dressing the hair, after washing, with the following preparation:

℞. Ol. morrhuæ,
Tinct. cantharidis, āā ʒj. M.

or an ointment composed of one part of the Unguent. Hyd. Nit. Oxyd. and three of scented pomatum, (E. Wilson,) or the following lotion to wash the head with night and morning:

℞. Ol. morrhuæ, ʒj;
Liq. ammoniæ, ʒss;
Tinct. cantharidis, ʒss;
Aquæ mellis, ʒij;
Spiritus Rosmarini, ʒiv. M.

The mercurial soaps recommended by Sir W. Marsh, and Dr. Moore, of Dublin, will be found very serviceable to wash the head with in cases of syphilitic alopecia: they are made by beating up a drachm of the white precipitate or red precipitate of mercury with an ounce of Windsor soap, adding a few drops of spirit, and a little scent.

Dr. Burgess speaks highly of the vapours of iodine, or sulphur, as superior to all other remedies in cases of alopecia not syphilitic.[1] I have elsewhere shown that the vapour of the bisulphuret, or iodide of mercury, arrests syphilitic alopecia, after one or two applications.[2]

[1] On Eruptions of the Face, Head, and Hands, &c., p. 205.
[2] On Secondary Syphilis, p. 26.

CHAPTER XXI.

ONYXIS—SYPHILITIC DISEASES OF THE NAILS.

THE matrix or root of the nail, is very commonly affected with syphilitic inflammation, under the influence of which the skin surrounding this part becomes thickened and red, and ultimately ulcerates; the sores thus produced having all the characters of secondary syphilitic ulcers. Sometimes the skin surrounding the nail continues red and everted, and does not ulcerate, but an offensive pus oozes out from between the nail and the skin. In other cases, the nail alone is affected; it cracks or breaks easily, becomes thick and opake, and loses its transparency in whole or in part; at other times the nail falls off without any appreciable inflammation of the skin, or apparent alteration in the structure of the nail itself.

Syphilitic diseases of the nails occasionally occur as isolated symptoms of constitutional syphilis, and then their nature may be mistaken, unless a strict inquiry be made into the nature of the diseases from which the patient has suffered: when they accompany other symptoms which are decidedly due to syphilis, these are generally superficial redness, or ulceration of the throat, alopecia, or diseases of the superficial structures of the skin. The treatment of onyxis is that of constitutional syphilis generally, of which it is always a symptom. Except in the ulcerated forms, local treatment has little or no influence over the disease.

CHAPTER XXII.

OF SYPHILITIC WARTS, EXCRESCENCES, VEGETATIONS, CONDYLOMATA, ETC.

VEGETATIONS, excrescences, or warts of varied form and appearance upon the skin or edges of the mucous membranes, constitute the last variety of syphilitic diseases of the skin. These excrescences appear on the skin or muco-cutaneous surfaces of the male and female organs of generation, both in the primary and secondary forms of syphilis. They are variable in appearance and consistency, sometimes resembling common warts on other parts of the integument, and at others, presenting a surface so fibrous, or granulated, that they have been supposed to resemble the root of the leek or the surface of the raspberry. These fungi, excrescences, warts, or vegetations, by all which names they are indiscriminately known, grow from the surfaces of the skin in the immediate vicinity of the organs of generation, or from the under surface of the prepuce, and from the glans penis in the male; and in the female from the labia majora, the nymphæ, or the entrance of the vagina itself, which they sometimes entirely surround.

These warts or excrescences arise from several causes. In the first instance, they are commonly produced by the irritation excited by the gonorrhœal discharge on the common integument in the vicinity of the organs of generation, and they are commonly produced by the same discharge on what are termed the muco-cutaneous surfaces of these organs (by the muco-cutaneous surfaces I mean those where the skin and mucous membranes insensibly blend into each other.) On the pure mucous surface itself the warts are rare, though they may be sometimes found at the orifice of the urethra, or the entrance to the vagina, which is sometimes studded with a number of small, hard elevations, which are doubtless warts in their incipient state. Warts, then, are caused, in the first instance, by the irritation produced on the common integument, or the muco-cutaneous surfaces of the organs of generation, by the

irritation of pure gonorrhœal discharges. They are caused, secondly, by superficial forms of irritation, excoriation, or ulceration of a venereal character, seated on the surfaces to which I have just alluded. These are most common in the male, and are situated on the glans penis itself, more commonly round the corona glandis, or on the under surface of the prepuce, these being properly mucocutaneous surfaces.

In the third instance, they arise from the surfaces or primary venereal sores themselves, from chancres or ulcers during the period of cicatrization; and most commonly this takes place when venereal ulcers are treated on the simple or non-mercurial plan. In such cases, more particularly when the patient is suffered to follow his customary avocations during the treatment of the primary syphilitic sore, the latter heals slowly and with difficulty, occasionally remaining stationary for many days together, and showing neither disposition to heal or spread, although its surface may be covered with healthy granulations. In such cases, when the sore does not close, instead of skinning over or cicatrizing in the usual manner of an ordinary ulcer, the surface assumes a hardened character, and begins to grow or throw up this hardened substance, which ultimately assumes the aspect of a wart or vegetation. In this way is the third variety of venereal excrescences produced.

All the varieties of warts that I have as yet described belong to the different forms of primary syphilis. Vegetations or warts, however, are commonly met with as symptoms of constitutional syphilis, and they are then termed condylomata. The secondary forms of syphilis, on some occasions, strongly resemble the primary forms; and hence it is, that, although the varieties of which we have just spoken are produced, like all the other forms of primary syphilis, by the direct application of the venereal poison, they present a striking resemblance to certain excrescences, or fungous growths, commonly denominated condylomata, which result from the contamination of the system. "However, with proper attention, primary condylomata can easily be distinguished from secondary condylomata; for the latter are uniformly accompanied or preceded by other symptoms which point out constitutional disease, and particularly by a very slight scaly or rubeoloid eruption, either with or without a superficial affection of the mucous membrane of the mouth and fauces."[1]

[1] Wallace; pp. 388–9.

The secondary condylomata are not always accompanied by affections of the skin or throat, but "they appear as a distinct symptom of constitutional syphilis in advanced periods of the disease." It is of the first importance to distinguish between these two varieties:—viz. the primary and constitutional, since the treatment suited to the one is not admissible in the other. The first varieties are generally purely local, and may be cured by local means: the second are constitutional, and require a general treatment for their eradication. In forming our judgment as to their true character, we must be guided by the history of the case, the preceding and accompanying symptoms, and the appearances of the disease itself. "They are not so hard as primary warts; they are more of a fleshy nature, more tender, and more apt to bleed. They have a more uniform surface; and instead of being formed of a number of smaller warts connected together, they are composed of one uniform mass. They do not approach so near the verge of the anus as primary watery excrescences generally do, being for the most part of the greatest extent, and most elevated near the tuberosity of the ischium. In some cases they become ulcerated, and discharge a great deal of very offensive matter; for the most part, the ulceration which takes place being superficial, and not reaching below the surface. Like the other symptoms of constitutional syphilis, these excrescences either continue in the same state, or become gradually worse, as no remedy is employed constitutionally for the cure of the disease."[1]

Venereal warts, excrescences, or condylomata, arise on cutaneous, muco-cutaneous, or mucous surfaces, though more rarely on the latter—

1st. From the irritation there produced by purely gonorrhœal discharges.

2d. From superficial ulceration or excoriation of a purely venereal character.

3d. From the cicatrices of excavated ulcers.

4th. As a symptom of constitutional or secondary syphilis; the first three kinds belonging to the different forms of primary syphilis.

"Whatever tends to excite the flow of an unusual quantity of blood to the penis, seems to create a disposition in these parts to the formation of warts. Irritation produced on the prepuce and

[1] B. Bell; on Gonorrhœa Virulenta and Lues Venerea, vol. ii., pp. 125—7. The secondary forms of condylomata are termed by the French writers *mucous tubercles*, mucous papulæ; they differ in nothing from the description I have already given, except in the name.

glans, as we have seen, by a variety of causes, disposes the small blood vessels of the part to sprout or pullulate, by which these warty excrescences appear to be formed." (Bell, vol. i. p. 414.)

"We have mentioned irritation as a cause of these excrescences, but it is only the slighter kinds of it that seem to produce them. They often succeed to a slight degree of inflammation, but never form on parts highly inflamed: on the contrary, much inflammation destroys the tendency in these parts to the formation of warts, insomuch that our most effectual remedies in the cure of warts, and for preventing a return of them, are such as always excite a good deal of pain and inflammation." (Ibid., pp. 416, 417.)

The surface of these fungi or vegetations frequently secretes a puriform discharge, and this discharge has a power of propagating a disease similar to that which produced it."

In proof of this assertion, I shall bring forward a case which Sir A. Cooper used to relate in his lectures. "A gentleman in Sussex was called to attend a lady in labour; he felt something in the vagina which appeared unintelligible, and on examination, found it to be a crop of warts. He delivered her, but did not say anything about the warts to the lady. In conversation with the husband, he told him that his lady had a number of warts. The gentleman stated, that at the time he was married, he had a wart on the penis, and he had no doubt that he had communicated them to his wife." (Cooper's Lectures, p. 497.) This case shows that warts occasionally, though the circumstance is rare, spring from a purely mucous surface; it proves also, beyond a doubt, their contagious character.

It is asserted by some authors, though denied by others, that all the varieties of syphilis are infectious; and Dr. Wallace more particularly asserts that each has a disposition to produce its like. "We have a remarkable proof of this assertion in the effects occasionally resulting from the application of matter secreted by these fungi; for although they may have been caused by poison derived from an excavated ulcer, their secretions, as we have seen, will most generally produce vegetations of their own kind." There can be no question about the contagious character of the secretions from secondary condylomata, the mucous pustule of the French writers; independent of daily observation, the experiments of Wallace, Vidal (de Cassis,) Waller, and many others, place the matter beyond a doubt.

These warts, or primary excrescences, grow in many instances from the epidermis, their attachment being so slight, that on being

removed the cutis vera is left entire. In other cases they proceed from the skin itself; they have not been observed to go deeper than this. Hunter seemed to entertain the idea that generally they are produced from the surface of the cutis vera. This corresponds pretty much with the opinion of Dr. Wallace, who believes that these vegetations have sometimes their origin in the papillary body covering the cutis vera, and sometimes in the rete mucosum itself.

We now come to speak of the treatment of vegetations; and here it will be necessary to recollect what has been said with regard to the divisions of these affections into the primary and secondary forms. The primary forms, being generally purely local diseases, are in most instances to be removed by a treatment purely local; the secondary, resulting from a poisoned or infected constitution, as generally require a constitutional or general treatment for their cure.

The primary forms of warty venereal excrescences are generally to be cured without great difficulty by local applications or means, either by the knife or the application of escharotic or irritating remedies. Hunter says, "They are so little of the true animal, and so much of the disease, that many trifling circumstances will make them decay: an inflammation in the natural and sound parts round the wart will give it a disposition to decay; many stimuli applied to the surface will often make them die. Electricity will produce action in them which they are unable to support; an inflammation is excited round them, and they drop off." These are the principles which are to guide us in the treatment of these forms of disease; the application of remedies which, producing irritation and inflammation in the surrounding integument, dispose the wart, in which the vital actions are very feeble, to drop off. The knife or ligature may be resorted to where the apex of the wart is large, and the base pedunculated or narrow. Where the base is broad, and its attachments to the skin extensive, it is better to trust to the remedies already mentioned, which we shall presently pass in review more particularly. Hunter mentions as escharotic remedies the nitrate of silver and the sulphate of copper; as stimulants, a mixture of equal parts of the acetate of copper and the powder of savine leaves. When the knife or ligature is used, it is always advisable to touch the cut surface with some caustic.

In the more ordinary cases these excrescences may generally be removed by bathing them and the contiguous parts, several times a day, with a strong solution of the muriate of ammonia or the bichlo-

ride of mercury.[1] With these applications the warts may be sponged freely several times a day, till as much irritation and inflammation are excited in the surrounding parts as the patient can reasonably bear. In mild and recent cases these remedies will generally accomplish a cure. When the surfaces of the warts are hard, if they are of long standing, or do not yield to the remedies already mentioned, it becomes necessary to employ escharotics and irritants of a more powerful character. When such are used, the parts "should be merely moistened with a pencil dipped in them, nor should this be repeated above once in two or three days." Amongst these stronger preparations are the acid nitrate of mercury, the tincture of cantharides, and the liquor potassæ arsenitis. Arsenic was a favourite remedy with Sir A. Cooper in the destruction of warts. He employed an ointment composed of one drachm of the oxide of arsenic (arsenious acid) to one ounce of spermaceti ointment or lard, the surface of the warts to be smeared with it frequently, according to circumstances. Powders which, when dusted over the warts and integument in their neighbourhood, irritate and inflame the latter, are generally more efficacious than solutions of the same substances. Amongst these may be mentioned equal parts of the savine powder and chloride of mercury, savine leaves powdered, and corrosive sublimate, and the hydrargyri nitrico-oxydum.[2] We may also use for this purpose equal parts of the dried or burnt alum, and the nitric oxide of mercury. "After these warts have been removed, by local irritants or by the knife, it will be necessary to use some astringent lotion, to restore tone to the capillaries of the diseased surfaces, and to remove any excoriation or catarrh which may have coexisted with the fungous growths." (Wallace, p. 337.) Strong acetic acid, or the undiluted Liquor Plumbi, are both excellent applications to many of the primary forms of warts, especially those which form round the orifice of the vagina, as a consequence of protracted gonorrhœal discharges. I have seen large masses of these warts disappear in two or three weeks by the

[1] ℞. Ammoniæ hydrochlor.,
Aceti destill.,
Aquæ, āā ʒij. M.
℞. Hydrarg. bichloridi, ʒss;
Sp. Vini, ʒj;
Aquæ, ʒiij. M.

[2] ℞. Pulv. sabinæ,
Hyd. bichloridi,
Hyd. nit. oxydi, āā ʒj. M.

use of the latter remedy, which is exceedingly convenient, as it occasions little or no pain; the skin generally remains for some time of a deep red in the places where these warts have been situated.

We may now inquire whether these vegetations, which are the consequence, as we have seen, of some forms of purely syphilitic diseases, require mercury for their cure, or for the prevention of their return, since in many instances they are very liable to do so. Mercury is unquestionably not required for the removal of the first form of venereal warts which are produced by the irritation of gonorrhœal discharges. Nor do we conceive it can ever be required for the cure and prevention of the second variety, which we have stated to be the result of venereal excoriations. In the treatment of the third variety it is possible that mercury may be occasionally required. The last form of vegetation, which springs from the surface of the excavated ulcer, rarely occurs where mercury has in the first instance been judiciously used for the cure of the primary ulcer. We must bear in mind, then, that a primary venereal ulcer for which mercury is judiciously employed, is less likely "to heal into a wart" than when such remedy has not been employed.

In ordinary and long-standing cases of vegetations which are the result of venereal sores, mercury will not be required, and we must, in most instances, trust to local remedies only. Hunter and Bell express themselves strongly on this point. "These excrescences (says the former) are considered by many not as simply a consequence of the venereal poison, but as possessed of its specific disposition, and, therefore, they have recourse to mercury for the cure of them; and it is asserted that such treatment often removes them. Such an effect of mercury I have never seen, although given in such quantities as to cure in the same person recent chancres."

The latter says, "The warts which succeed to chancres commonly remain equally firm and obstinate after mercury has been given as they were before, and are to be removed by the same means as if the constitution had never been diseased. This is a point which, in a particular manner, merits attention, for whilst the opinion is retained of warts on these parts being, in most instances, connected with a constitutional syphilis, much mischief is apt to be done by a great deal of mercury being given where no advantage can ever ensue from it. In the treatment of warts I

have known the constitution almost ruined by one course of mercury after another, without any effect upon the excrescences, which were afterwards easily and speedily removed by remedies applied directly to the parts themselves."

In the very recent state, where they spring from the surface of an ulcer which has been treated without mercury, they may, in some cases, be removed by the administration of this medicine in the usual way in which it is employed for the cure of chancres generally; but this, unquestionably, should not be done till local remedies have been fully tried, and found to fail. In the very recent state, then, of fungi springing from the surface of ulcers treated without mercury, this remedy may and should be employed if local means fail. If, again, warts have been removed by the knife, a plan certainly not generally to be recommended, and the cut surface run into a foul intractable sore, mercury may be employed for the treatment of such sore, which is, in all probability, specific. In all other instances of primary warts mercury must be abstained from, since not the least probable benefit is to be expected from its employ.

The treatment of the secondary forms of venereal excrescences is to be conducted on principles totally different from those which guided us in the management of the primary forms. Here local treatment is comparatively of little use, and constitutional or general treatment is most to be depended on. When, then, we are fully satisfied, from the history of the patient, the appearance of the disease itself, and the preceding or accompanying symptoms, that we are called to treat a case of this nature, if there exist no special contra-indications in the constitution or state of the patient at the time he is presented to us, we should lose no time in submitting him to a mercurial course under the rules which ought generally to guide us in the administration of this drug. The mercurial vapour-bath may be employed with great benefit, and the condylomata touched with Plenck's solution.[1]

[1] ℞. Alcoholis,
Acidi acetici, āā ℥ss;
Hyd. bichloridi,
Aluminis,
Camphoræ,
Plumbi carbonatis, āā ʒss.

M. Verrucæ aut condylomata penicillo hoc liquore madido semel vel bis de die tangantur.

CHAPTER XXIII.

CONSTITUTIONAL OR SECONDARY SYPHILITIC ULCERATIONS OF MUCOUS MEMBRANES.

SECONDARY or constitutional syphilitic ulcerations of mucous membranes are extremely common. They may be seated in all parts of the mouth, upon the tonsils, on the posterior part of the pharynx, in all parts of the nasal fossæ, at the orifice of the glottis, and even in the larynx itself.

The mouth is frequently the seat of superficial ulcerations, sometimes placed upon the tongue, the pillars of the fauces, the inner surface of the lips, or other parts. Occasionally these ulcerations resemble ordinary aphthæ; again there is a distinct loss of substance surrounded by an inflamed margin, and, at other times, it appears as though a pencil dipped in a strong solution of nitrate of silver had been drawn over the tongue. These ulcerations generally, if not always, occur in persons who have taken mercury for the cure of some venereal symptom. They are not under the control of any specific treatment, but generally improve under a regulated diet, general treatment, and frequent gargles, more particularly those in which tannin forms an ingredient.[1] In most instances they are extremely difficult to cure; and are very frequently rendered worse by mercury. These aphthous, or superficial ulcerations in the mouths of patients who have suffered long under a venereal taint, and have irritable mucous membranes, are generally due to mercury and not to syphilis. It is remarkable that such patients suffer much also from dyspepsia. It almost invariably happens that mercurial medicines given inter-

[1] ℞. Tannin, ℈j;
Spiritus vini Gallici, ʒij;
Aqua rosæ, ʒvj. M. ft. gargarisma.
℞. Tincturæ myrrh. ʒj;
Mellis cuprati, ʒss. M.
The ulcers to be touched with this liniment night and morning.

nally aggravate these conditions of the mouth, whilst they subside under the use of mild astringents and tonic gargles,[1] the administration of small doses of conium and opium, and the cold infusion of sarsaparilla in lime water.[2] Where such conditions of the mouth are associated with other symptoms of constitutional syphilis, they may still have a mercurial origin: should the general means we have mentioned fail in benefiting them, the mercurial fume applied locally, or the mercurial vapour-bath, may be used.

The syphilitic ulcers of the throat, pharynx, and fauces appear under several forms.

1st. The deep excavated ulcer of the tonsil, covered with an ash-coloured slough, and surrounded by a deep, livid, red condition of the mucous membrane. This ulcer, though generally seated between the pillars of the fauces, is sometimes seen on the uvula. This is the true venereal sore throat of Hunter, and English surgeons generally; and, unless the remedy be specially contra-indicated, requires a mercurial course for its cure. It may occur with other symptoms of constitutional syphilis, and very frequently is found to be associated with persistent induration of the cicatrix of a recently-healed chancre.[3]

2d. Creeping superficial ulcers, found on the uvula, fauces, and pharynx.

3d. Sloughing ulcers extending rapidly down the fauces, covered with white tenacious sloughs. These may extend over the whole of the pharynx; they resemble precisely phagedena in other parts.

4th. Deep, livid redness of the arch of the palate, fauces, and throat, occurring with various forms of the syphilida, or soon after the healing of a primary sore. These ulcers, &c. may occur with or without different forms of cutaneous eruption, pains in the head and limbs, loss of hair, and other forms of constitutional infection: also with the most varied conditions of the general health. One kind of ulcer of the soft palate is generally situated immediately

[1] ℞. Acid. hydrochloric., ♏ xl.—℥j;
Tinct. cinchonæ, ℥j;
Aquæ fontanæ, ℥vij. M. ft. garg.

[2] ℞. Rad. Sarsæ, ℥iv;
Rad. glycirrhizæ, ℥j;
Liq. calcis, Oij. M.
Macera per horas xxiv. deinde capeat cochlear. iv. larg. bis die.

[3] This ulcer, which has been termed "amygdaline chancre," has been inoculated with success. The details of the case may be found in the 'Annales des Maladies de la Peau, et de la Syphilis;' it is also quoted by Vidal de Cassis, p. 404.

under the posterior nares: by passing the finger into the mouth, it will be perceived at once where the hard palate terminates and where the velum commences; the length of the latter, which is variable, will also be at once ascertained: it is this part of the throat which is most commonly perforated by secondary venereal ulcers, which are commonly due to disease concealed in the passages of the nose: there is redness in this place some days before perforation takes place, and this, being unaccompanied by that dryness which accompanies ordinary syphilitic inflammation of the fauces, is not under ordinary circumstances noticed by the patient.

Patients who have suffered from constitutional syphilis, frequently complain of pains in the throat, increased by deglutition, and referred to various points about the larynx and pharynx: the parts which are the seats of these pains have previously been affected by ulcers, or inflammation; but although the ulcers had healed, the pains remained. I have frequently been unable to detect any lesion in parts thus affected, and have been led to regard many of these cases as pure syphilitic "neuroses."

The treatment of the venereal ulcers of the throat resolves itself into local and constitutional. To the first variety local treatment is hardly beneficial, and against it, unless specially contra-indicated, as I have already said, a mercurial course should be directed, the best mode being by inunction, employing at the same time the mercurial vapour-bath.

Local treatment of all the other forms is very important. The ulcers should from time to time be touched with one of the caustics already recommended in the treatment of the primary ulcer; such as the nitrate of silver, the acid nitrate of mercury, the muriatic, or nitric acid.[1] In the intervals of these applications gargles of various kinds are very useful. I have found the oxymel æruginis one of the best of these![2] With this local treatment should be associated whatever constitutional treatment the nature of the case may point out, and here so various are the conditions that it is impossible to lay down any fixed rules. Should mercury be used,

[1] Liquid caustics, such as the nitric acid, or acid nitrate of mercury, should be employed with great caution in extensive ulcerations of the fauces, soft palate, or pharynx. When used, the material should never be so wet as to risk a drop of fluid falling into the œsophagus, or pharynx; the fumes should also be suffered to pass off before the remedy is applied.

[2] ℞. Oxymel æruginis, ℥ij;
Aquæ fontanæ, ℥vj. M. ft. gargarisma.

and how? This will depend upon the nature of the primary sore; upon the state of the cicatrix; the form of the cutaneous eruption, if any be present; condition of the general health; and the previous treatment. Should there be a scaly eruption, an indurated cicatrix, and tolerably good health, mercury may be fully employed with a reasonable hope of success, according to the general principles inculcated in this work. It may also be employed as an alterative, under the form of the iodide, or biniodide, should its full employ be contra-indicated, and other treatments fail.

I would mention as remedies likely to be of service;—the mercurial vapour-bath, the cold infusion of sarsaparilla in lime water, and full doses of opium; with the mineral acids, guaiacum, or the hydriodate of potass.

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CHAPTER XXIV.

OF SYPHILITIC DISEASES OF THE NOSTRILS AND NASAL FOSSÆ.

PRIMARY venereal sores may unquestionably be produced in the nostrils by the direct application of the virus: these instances are, however, rare, and must be the result of accidental inoculation by means of the instruments, sponges, or linen used to cleanse sores on other parts. Secondary ulcerations are frequent. They are seated sometimes on the septum nasi; and frequently perforate the cartilage, but most commonly these secondary ulcerations affect the mucous membrane of the superior, or æthmoidal spongy bones. Constitutional or secondary syphilitic affections of the nostrils are by no means uncommon. They generally appear under one of the following forms. In the first they are characterized by chronic inflammation of the pituitary membrane, with an alteration in the character of its secretions, the latter being offensive, profuse, and commonly tinged with blood. In the second form, we find ulcerations of varied character and appearance; and again, discharges of vast quantities of hard, discoloured, and offensive crusts, seemingly of dried mucus, without any alteration in the appearance of the mucous membrane of the nostrils; at least so far as this can be seen, though these discharges may probably depend on chronic inflammation of the membrane lining the upper meati of the nose. In the latter form there is also a marked alteration in the character of the voice.

These diseases often commence with the symptoms of ordinary cold; the nose is dry and uncomfortable, and the voice slightly hoarse: the symptoms, however, do not yield to ordinary treatment, and to this dryness ultimately succeeds discharge of fetid muco-pus, and blood, and hard crusts of inspissated mucus, sometimes mixed with small portions of bone. An ordinary syphilitic ostitis, or periostitis, affects the ossa-nasi, by which they are frequently thickened to a considerable extent. I have seen one or two cases of this character. The secondary syphilitic diseases

which affect the nose are, however, most frequent in its interior, and affect the lateral or central cartilages, the spongy bones, or the membrane covering these parts.

These diseases of the nasal fossæ very commonly occur as isolated symptoms of secondary syphilis, and under such circumstances, without a correct history of the case, their nature might be mistaken.

Their treatment is constitutional and local. The former is that of secondary syphilis generally, and in these affections the iodides of mercury are singularly serviceable. The local treatment consists of the vapour of the iodide, or bisulphuret of mercury, directed by a very simple process into the nasal fossæ, for a few minutes daily; injections of calomel and lime water; the bichloride and lime water, or weak solutions of creasote.

The nasa-lacrymal canal is frequently obliterated by secondary syphilitic diseases of the nasal fossæ.

CHAPTER XXV.

OF SECONDARY SYPHILITIC AFFECTIONS OF THE TONGUE.

THE diseases which affect the tongue, during the presence of a venereal taint in the system, are due to three causes:

1. The use of the iodide of potassium;
2. The exhibition of mercury; and
3. To syphilis itself.

The general symptoms of these affections of the tongue are increased vascularity and redness, tenderness; ulceration, superficial or deep; enlargement, a nodulated or uneven condition of its surface, fissures, cracks, and vegetations.

There is no doubt but that, in certain cases, iodine does produce a disease in the tongue, characterized by many of the symptoms I have mentioned. I have elsewhere recorded some cases of this nature.[1] A surgeon consulted me for a skin disease of suspicious character, for which he had attempted to take the iodide of potass; "but," said he, "whenever I use this medicine for two or three days, solid lumps, like venereal tubercles, make their appearance on the skin and on the tongue, and the latter organ becomes so large and painful, that I am obliged to give the remedy up." Such is an acute condition produced by iodine, which subsides when the drug is discontinued; but, in the more chronic forms, where the mischief has been slowly produced, the disease in the tongue remains even when the medicine is used no longer.

Mercurial and venereal diseases of the tongue are frequently confounded with each other, and great discrimination and experience, with the most accurate history of the case, and of the effects of remedies, are necessary to enable us to determine the exact nature of these affections. A gentleman who had suffered from various forms of constitutional syphilis for five years, was sent to me for my opinion as to the nature of a disease in his tongue, which had been in existence for two years, and had resisted the ordinary

[1] Provincial Medical and Surgical Journal, No. 8, 1852.

means of cure. The organ was large, and could not be retained within the teeth. The saliva was continually running over the chin; it was exceedingly tender to the touch, crumbs of bread and the mastication of solid food occasioning severe pain. The centre of the tongue was hard and nodulated, and there existed also in the centre, a deep, foul ulcer, extending through a great part of the substance of the tongue. On either side of the tongue were small fungoid growths, resembling small ripe strawberries. In other respects the health was good, and there was no symptom of secondary syphilis present, except some coppery macular stains on the shoulder and abdomen. This patient had taken large quantities of the iodide of potassium for three years, so much, said he, that my perspiration stained my linen brown: he had also used mercury by the mouth: the latter remedy always increased the mischief in the tongue. In this case, it required some care to determine whether the disease were due to mercury, syphilis, or iodine; and in such cases it is exceedingly difficult to form a correct opinion, particularly where mercury internally disagrees with the patient.

The disease was syphilitic, and was ultimately completely cured by the moist mercurial fume, used daily till the gums were sore.

Aphthous spots and superficial ulcerations on the tongues of patients who have taken mercury internally, and who are still suffering from venereal taint, are due in many instances to mercury, and not to syphilis. It is remarkable, that such patients suffer much from dyspepsia. It almost invariably happens, that mercurial medicines in any form, given internally, aggravate these conditions of the tongue, while they subside under the use of mild astringent gargles, and the administration of small doses of the extracts of conium or opium. When they coincide with a well-marked venereal disease, they may still be due to mercury, and mercury given in any form internally is, in such states, contra-indicated. A patient under my care for syphilitic lepra, for which he was using the mercurial vapour, and taking three grains of blue pill every night, began to complain of his tongue, although the gums were hardly affected. The organ became large, tender, and covered with aphthous patches. A large induration appeared on the back of the tongue, which ulcerated, and ended in a deep, foul ulcer, with surrounding induration. These symptoms increased, while the scaly disease of the skin disappeared. This had happened twice before when the patient had taken mercury.

The mercurial tongue may be confounded with the syphilitic one,

if the history of particular symptoms and the effects of remedies upon them be not carefully noted and watched. Thus, we see, that the remedy which cured the lepra produced the disease in the tongue. Mercury, in some cases, fixes on the tongue, while it but slightly affects the gums. Acute mercurial glossitis is hardly to be mistaken, as it directly succeeds to the use of the remedy, and subsides, though slowly, when this is discontinued: in such cases the tongue is large and patchy; red in some places, white in others, very much resembling the appearance of the glans penis in acute balanitis. The chronic forms of mercurial disease in the tongue are much more difficult to distinguish.

Where chronic mercurial glossitis occurs in patients who have long laboured under a venereal taint, it becomes a matter of some difficulty to determine whether the mischief in the tongue is due to mercury or syphilis; and sometimes the effects of treatment only will set us right on this point. I have been consulted in several cases by patients who have laboured under such conditions of tongue for more than twenty years:—"A surgeon, aged 47, consulted me for an old venereal complaint of twenty-four years' standing, of which the more prominent features at the time of his visit were patches of psoriasis on the hands and other parts, sarcocele of the right testis, and tubercles, with fissures in the tongue. He had been salivated several times, and taken large doses of the iodide for long periods; but the ultimate effects of treatment showed that the condition of the tongue was venereal."

The symptoms which are most characteristic of the true venereal tongue are vegetations, deep fissures or cracks, ulcers, and tubercles. The vegetations of a syphilitic nature which occur on the tongue, occupy its sides or its surface, are vividly red, and resemble a very small ripe strawberry. I believe these never occur but from syphilis: they are met with alone, or in conjunction with fissures, tubercles, or ulcers; they come on early after the disappearance of other symptoms of syphilis, or are associated with them, whether mercury or iodine have been employed or not.

The deep fissure, or crack in the tongue, is also commonly due to syphilis: the tongue sometimes appears as though it had been cut with a knife: the venereal ulcer of the tongue is most frequently long and sinuous: we are obliged to unfold the organ, as it were, to see the bottom of it; and its sides, unlike the common fissure, are more or less indurated. The venereal tubercle appearing in the tongue, is a hard, solid body, occurring alone, or with some of the

other symptoms I have mentioned: it generally comes on late in the history of a venereal taint, and sometimes long after the disappearance of every other venereal symptom: it resembles very much the state of tongue produced by the iodide of potassium, and may certainly be confounded with incipient scirrhus of the tongue.

Some discrimination is necessary to enable us to determine the nature of the disease correctly, and consequently, to frame an appropriate plan of treatment. To enable us to do this, attention to the following points is important:

1. The condition of the general health.

2. The nature of any concomitant disease, whether venereal or not; and whether the patient has at any and at what time suffered from constitutional syphilis; under what forms, and how it has been treated.

3. Whether mercury or iodine have been taken for the disease in the tongue, and with what effect upon it.

4. The condition of the submaxillary lymphatic glands.

5. Whether the patient have worked at any occupation in which the fumes of mercury are employed.

A careful inquiry, based on these suggestions, will most frequently enable us to ascertain the actual nature of the disease, and thus to treat it properly.

If an affection of the tongue, of the nature of which we are doubtful, be aggravated by mercury internally administered, it is generally benefited by opium, conium, sarsaparilla and lime-water, with gargles of tannic acid, brandy and water, or the oxymel æruginis: should these fail, the mercurial fume, used locally or generally, is commonly successful.

CHAPTER XXVI.

OF SYPHILITIC ULCERATION OF THE LARYNX.

ONE of the most formidable varieties of constitutional syphilis is ulceration of the mucous membrane of the glottis, and larynx. Of this form of disease I have unhappily seen several examples; and modern writers on venereal diseases, more particularly Mr. Carmichael and M. Cazenave, have reported others. Syphilitic ulceration of the larynx generally follows or accompanies other similar diseases of the nasal fossæ, throat, or pharynx, or various forms of the syphilida: it does not commonly occur as a solitary symptom of constitutional syphilis, and consequently we are the less likely to be deceived as to its true character.

The symptoms are an alteration in the character of the voice: it becomes hoarse, husky, or totally lost; the patient expectorates a fetid pus, and portions of slough mixed with blood; the thyroid cartilage is sometimes enlarged, and there is considerable tenderness when the larynx is examined with the fingers. In this condition the patient is generally much emaciated, and night perspirations are present. These symptoms closely resemble those of laryngeal phthisis, and even ordinary phthisis pulmonalis: from the former disease syphilitic ulceration of the larynx is to be distinguished by the precedence of primary, or other constitutional symptoms of syphilis, or by the co-existence of the latter. The stethoscope will hardly suffer us to mistake this disease for ordinary pulmonary consumption: indeed the almost invariable existence of other forms of constitutional syphilis with ulceration of the larynx, will, in most instances, clear up any doubt as to the true nature of the latter.

CASE XXII.

J. M'K— was admitted under my care first as a home, and afterwards as an in-patient, of the Queen's Hospital. He had been suffering for two years from a chronic pustulo-crustaceous

disease of the skin, and a large ulcer in a sloughy condition occupied the whole of the pharynx. He was much emaciated, had constant cough, expectorated an offensive bloody muco-pus, and could not speak above a whisper. Auscultation detected no disease of the lungs. The constitutional symptoms of syphilis had been preceded by chancres of the glans penis and urethra, the latter of which were not healed. He underwent a variety of treatment with little benefit, and ultimately died of extreme exhaustion. The inner surface of the larynx was destroyed for a great extent by an ulcer, precisely resembling that which occupied the pharynx, and a series of creeping ulcers extended down the urethra nearly to the neck of the bladder.

M. Cazenave has recorded some cases of syphilitic ulceration of the larynx cured by the iodide of mercury: in all the cases that I have seen I have found the disease difficult to manage, and very frequently fatal. Mr. Carmichael has experienced the same difficulty, and has proposed to lessen it by performing tracheotomy. "If the ulcer is in the larynx, there can be little hope of inducing it to heal, on account of the constant current of air through this passage, and the frequent motion to which it is subjected, as the chief organ of voice. I have, however, in many instances, passed into it with decided advantage, a long bent probe, or metallic bougie, covered with lint, moistened in a solution of nitrate of silver, of from six to ten grains to the ounce of distilled water. In the act of passing the bougie, thus armed, into the larynx, the patient should be desired to project the tongue as far as possible from the mouth, which prevents the epiglottis from closing the aperture of the larynx; but in the great majority of cases, I must confess that nothing more than mere temporary alleviation was obtained by this or any other measure I have seen tried, with the exception of tracheotomy. The other measures to which I allude, are mercurial fumigations, mercury internally exhibited, and blisters, moxa, tartar-emetic ointment, caustic issues, and setons to the integuments covering the larynx."[1]

[1] Carmichael's Clinical Lectures on Venereal Diseases, pp. 141—2; Dublin, 1842

CHAPTER XXVII.

ON THE SYPHILITIC TESTICLE.

THE syphilitic testicle is a totally different disease to that which I have already described under the name of "consecutive gonorrhœal orchitis." The diseases are different in their nature, their symptoms, their pathology; and they require also different remedies for their cure. This affection is commonly called syphilitic sarcocele, and also the syphilitic or venereal testicle.

Symptoms. Diagnosis.—When a gradual enlargement of the testicle comes on without pain in individuals who have suffered from a well-marked constitutional syphilitic taint, however long such symptoms may have disappeared, and whether any other symptom of secondary syphilis be present or not, there is reason to suspect that the disease in the testis may be of a syphilitic character. This enlargement takes place gradually, without pain in the part, and without pain in the back or loins. When it is handled there is little or no tenderness present, unless the organ be firmly pressed. The tumour is smooth and heavy, occasionally, however, lobulated or uneven on its surface, and in its more advanced stages no trace of the epididymis can be felt, and the spermatic chord appears quite free from disease. There are many other diseases of the testis with which the syphilitic testicle may be confounded, and from these it is of the first importance to distinguish it, since in a majority of cases this disease is very amenable to treatment, and the records of surgery show that many testicles have been removed under the suspicion of their being cancerous, which were, in fact, nothing more than ordinary syphilitic sarcocele, occurring as an isolated symptom of secondary syphilis long after any other manifestation of this disease. The diseases with which syphilitic sarcocele may be confounded, are: 1. Chronic inflammation and enlargement of the testes from causes which are not syphilitic. 2. Scrofulous enlargement of the testes. 3. Scirrhus of the testes; and chronic consecutive gonorrhœal orchitis. I think it is hardly

possible to confound this disease with either hydrocele or hæmatocele.

Whenever gradual enlargement of the testes takes place without any evident cause, and under the circumstances already mentioned, and the patient has previously suffered from symptoms of constitutional syphilis, there is great reason to believe the disease syphilitic, and such a supposition should always be acted upon before any more active measures be resorted to, particularly those which have relation to any operative procedure. In the more acute forms of consecutive gonorrhœal orchitis, the testicle is red, shining, and intensely tender and painful; in the syphilitic sarcocele, the tumour is indolent from the commencement, is not painful, and is not tender even when hardly pressed. In the more chronic forms of consecutive gonorrhœal orchitis, there may be no tenderness or pain, but the tumour is not heavy or smooth, like syphilitic sarcocele, and the epididymis, to which the enlargement in the former case is chiefly confined, may be distinguished separately from the body of the testis itself.

With the scrofulous testis, and simple chronic enlargement of the testis, syphilitic sarcocele may be confounded, without great care in the analysis of the history of the case. The effects of treatment, however, will frequently clear up doubts when any exist on this point.

"Though a late symptom," says Mr. Hamilton,[1] "yet between it and the primary affection there is generally a chain of connexion by some well-marked secondary affection, (not always.) When the sarcocele is unaccompanied by these, their previous existence and history help to distinguish it from simple chronic enlargement, from which there is otherwise no local difference or mark of distinction."

This disease very often occurs as an isolated symptom of constitutional syphilis, when the patient has been supposed well for years; and these are just the cases, where the health is otherwise good, that constitute the difficulty in diagnosis. At other times the disease is associated with the sloughing ulcer of the pharynx, with various forms of skin disease, or pains in, or diseases of, the periosteum and bones.

The syphilitic sarcocele, although easily distinguished from simple hydrocele of the tunica vaginalis, is sometimes complicated

[1] Essays on Syphilis—Syphilitic Sarcocele. By John Hamilton, Surgeon to the Richmond Hospital, Dublin.

with a small effusion of fluid into this part, and then the disease is named hydro-sarcocele. This form of hydrocele does not require operation: if a trocar be pushed into it, the body of the testis is sure to be wounded: the fluid is generally absorbed as the testicle approaches the healthy condition. Should it not do so, the fluid is easily evacuated by puncturing the scrotum with a fine needle.

In syphilitic hydro-sarcocele the testis is large, the fluid small; in ordinary hydrocele, the size of the testis is not increased, and the collection of fluid large; a precisely opposite condition to the former.

The syphilitic testicle may certainly be mistaken for certain forms of scirrhus of this gland. Dupuytren, Ricord,[1] and M. Helot,[2] believe that numbers of testicles which were syphilitic have been amputated under the suspicion of their being cancerous. The condition of the inguinal glands will sometimes, but not always, assist us in forming a diagnosis on this point, as the absorbents of the testes open into the lumbar, and not into the inguinal glands.

Pathology.—The best account we have of the pathology of the syphilitic testicle, has been given by Mr. Hamilton, of the Richmond Hospital, Dublin. In one form of disease the effects of chronic inflammation only are detected, and this has been termed by Mr. Hamilton, "simple syphilitic sarcocele." It consists in the "deposition of firm lymph of a pale yellow colour, into the interstitial cellular tissue external to the tubuli testes, as well, probably, as into the tubuli themselves." (On Syphilitic Sarcocele, p. 21.)

"A much more common pathological appearance of syphilitic disease of the testicle, is the presence of one or more tubercles in the epididymis or body of the testes. These tubercles are of a yellow colour, of a consistence rather less firm than that of coagulated lymph. Very small at first, they gradually enlarge, and according to their duration, may vary from that of a hemp-seed or split-pea, to that of a chesnut, or even larger. They have a well-marked cyst, which can, by careful dissection, be separated from the yellow inorganic substance contained in them, and from the glandular substance of the testes in which they are imbedded. The yellow substance within the cyst has sometimes a laminated arrangement. In some preparations the yellow tubercle has gradually so increased as to have caused absorption of the glandular structure of the testicle, and, finally, to have taken its place."

[1] Gazette des Hôpitaux, Aug. 25, 1845.
[2] Gazette Médicale, Oct. 18, 1845.

"When the progress of the yellow tubercle is not stayed by treatment after having attained a certain size, it begins to soften in the centre, or at the side nearest the surface of the testicle, where it causes an inequality; adhesion takes place between the tunica vaginalis and scrotum, and at last, these structures, with the tunica albuginea, give way, and the surface of the tubercle becomes adherent to the skin of the scrotum. Suppuration of a slow, indolent character ensues, the abscess bursts, and discharges very little matter, and very thin, and terminates in fistula or lipoma, and total disorganization of the testicle; the same disorganization may occur without any suppuration. The tubercles are absorbed, but, at the same time, the glandular structure of the testes disappears; nothing remains in the place of the atrophied testicle, but a hard, irregular, fibro-cartilaginous, contracted mass, in which ossific matter is sometimes deposited.[1]

Virility.—The virile power is not affected in the early stages of syphilitic sarcocele, unless the disease extend to both testicles, which is not commonly the case; but in the advanced stages, or in protracted cases, especially where suppuration has taken place, and a spermatic fistula formed, the virile power is always more or less weakened. The desire for intercourse is not lost, neither is the former erection much weakened, but the ejection of semen does not take place, simply from the fact that the glandular secreting structure of the testes is destroyed. I believe that when this is the case the secreting power of the testes is never recovered. I have watched several cases of this kind for some years, and no improvement in virility has taken place. I have repeatedly examined the discharge from spermatic fistulæ in these and similar cases, but never in one single case have I been able to detect any spermatozoa.

Treatment.—In the earlier stages of what has been described as simple syphilitic sarcocele, local depletion by means of a small number of leeches, may be employed if much tenderness be present. The patient should at once be placed upon a mild mercurial course suited to his age and constitution. For this purpose the iodides of mercury are most efficacious. The iodide of potassium may also be employed in conjunction with the mercurial vapour-bath. Alone, the iodide of potassium will frequently disappoint us, and will not cure the disease. As local applications, frictions, with mercurial

[1] Hamilton; op. cit., pp. 23–25.

ointment and the extract of belladonna, the compound iodine ointment, or the ointment of the iodide of lead, are useful: the two former irritate the scrotum; the last does not, and, therefore, I prefer it. Compression, as recommended in consecutive gonorrhœal orchitis, is comparatively useless. In some obstinate cases I have blistered the testes with great benefit. Where sarcocele occurs as a complication, and other and perhaps more important syphilitic symptoms are present, the treatment passed in review may require modifications to suit the particular circumstances of the case, more especially where the disease of the testes is complicated with the sloughing ulcer of the pharynx or fauces.

CHAPTER XXVIII.

ON CONSTITUTIONAL SYPHILITIC DISEASES SEATED IN THE MUSCLES.

CASE XXIII.

Syphilitic tumour in the muscles of the fore-arm.

M. V——, was admitted, under my care, into the Queen's Hospital, in April, 1853. She had had primary sores five years previously, and since that time had suffered from various forms of skin disease, ulceration of the throat, and alopecia. She was admitted for a large circumscribed tumour, which appeared imbedded in the flexor muscles of the right fore-arm: the tumour was as large as an orange, not very tender to the touch, the skin covering it not altered in appearance. I considered it of venereal origin, in fact, a muscular node: it coincided with severe nocturnal pains in the bones of the head and legs. The tumour disappeared after six weeks' treatment by the iodide of potassium and the biniodide of mercury, with occasional blisters, pressure by means of iodine and mercurial plasters, and frictions with the ointment of the iodide of lead.

I have described, in another part of this work, other tumours of syphilitic origin, which are seated frequently on the tendons near their insertions: M. Lisfranc has described such diseases under the name of "white nodosities of the tendons." M. Bouisson, who has written a very good monograph[1] on syphilitic diseases of the muscles, mentions a case where the tumour was seated in the substance of the tendo-achillis, and was cured by the iodide of potassium. I have seen another tumour of this kind in the substance of the gastrocnemius, and they have been observed by M. Bouisson in many other muscles. M. Bouisson thinks they are peculiarly liable to occur in the tongue and lips. These tumours occur late in the history of a constitutional syphilitic taint, and have, in most cases, been preceded by other and more common symptoms of secondary sy-

[1] Gazette Médicale, July 11–18, 1846.

philis, which renders their nature probable if not certain. The general remedies best suited to such cases are the iodides of mercury, potassium, sodium, and iron, with the mercurial vapour bath; locally, blisters and frictions with pressure: should any attempt at extirpation be made, under a mistaken idea as to their true nature, it is all but certain that the wound thus produced would assume all the characters of a syphilitic ulcer.

CHAPTER XXIX.

SYPHILITIC DISEASES OF THE PERIOSTEUM AND BONES.

(OSTITIS, PERIOSTITIS, CARIES, NOCTURNAL PAINS, ETC.)

AFFECTIONS of the periosteum and bones constitute a most important class of secondary syphilitic diseases, varying in their nature from pain in the bone simply, without apparent alteration in its structure, to complete destruction and disorganization.

Pains in the bones.[1]—These pains are seated in various parts of the osseous system, principally in the bones of the head and extremities: they are generally worse when the patient is warm in bed, but at times they are present in the day also. The parts which are the seat of such pains are sometimes tender to the touch, occasionally hot, or slightly enlarged; in other instances such symptoms are not present, and the disease seems to consist in a lesion of sensibility merely. I do not think, however, that this is the case, or if it should be, the instances are very rare. In the shafts of the long bones, it is exceedingly probable, if not certain, that these pains are due to syphilitic inflammation of the medullary membranes of these bones. I have elsewhere shown this to be the case.[2]

These pains have been supposed by many to be due to the mercury which has been given for the cure of antecedent constitutional syphilitic symptoms: to this it may be replied, that mercury given for the cure of other diseases, not venereal, does not produce such pains; that workers in the fumes of mercury are not so affected; that such pains occur where mercury has never been given for the cure of syphilis, and, again, such pains are frequently cured by mercury.

The treatment best suited to these pains consists in the adminis-

[1] Douleurs Osteoscopes.

[2] On the Nature and Treatment of some Painful Affections of Bone: Churchill, 1853.

tration of the iodide or bromide of potassium, in full doses, which may be advantageously combined with colchicum and aconite in some cases; also decoctions of the woods, especially the guaiacum, with conium, and opium; if the parts be tender, or the pains fixed and not fugitive, blisters are exceedingly useful: should these all fail, mercury may be tried. This treatment should be associated with simple vapour-bathing, or the mercurial vapour-bath twice or thrice a week. I have treated two cases with complete success, with full doses of the iodide of potassium and colchicum, with the mercurial vapour-bath, where the pains had never been absent for one night in one case for seven, and the other for thirteen years. I think division of the periosteum an uncertain remedy, unless there be well-marked fixed tenderness, and then it disposes to necrosis, or caries of the superficial laminæ of the bone. Where the pain appears to be seated in the medullary canal of the shaft of a long bone, as the tibia, the canal may be opened with safety and success (after the failure of the other remedies,) on the plan already recommended and practised by me.[1]

Case XXIV.

E. C. entered the Queen's hospital, under my care, in August, 1851, with various secondary syphilitic symptoms. Her chief complaint was of severe nocturnal pains in the tibia of the right leg, which was somewhat enlarged, and tender to the touch; the pain in the bone was so severe as to prevent rest altogether: she took the iodide of potassium, and the biniodide of mercury, with little or no benefit: blisters afforded, at first, a temporary alleviation from pain for a few days, but at length ceased to afford even a slight relief. The patient suffered so much that she repeatedly begged of me to amputate her leg. The case was one of secondary syphilitic inflammation, affecting the medullary membrane of the shaft of the tibia, which, in a minor degree of intensity, is in my opinion a very frequent cause of pains in the long bones. I determined to trephine the bone, to open the medullary canal, and let the blood flow from the divided vessels of the bone and medullary membrane. This was done, whilst the patient was under the influence of chloroform, on Sept. 21. I opened the medullary cavity with a long crowned trephine. On removing the bone, the medullary membrane, turgid with black blood, which ran from it

[1] Op. cit., On some painful Diseases of Bone.

in a stream, protruded through the opening; the perforation was filled with a piece of soft lint dipped in oil. No medicine was given.

On the 24th, pain was no longer felt; the opening closing rapidly with new bone.

On Nov. 7, I removed a second piece of bone with the trephine, which was carious; and in doing so, I penetrated the medullary canal a second time. Not the slightest constitutional disturbance followed either operation. The patient left the hospital well on Oct. 10th.

Those enlargements of the bones, termed nodes, appertain to the natural history of the progress of syphilis, if suffered to go on unchecked by remedies. Nodes arise as a consequence of primary venereal ulcers, when the disease has become constitutional from the absorption of the poison, and the poison has penetrated very deeply into the system. The bones are amongst the last organs to be affected by the venereal poison; hence, Hunter places them amongst the second order of parts affected in constitutional syphilis, and Ricord ranks them amongst his tertiary symptoms, in which, says he, the syphilitic virus is completely transformed. "It might be said (says M. Ricord) that in the secondary forms of constitutional syphilis, the virulent cause—*i. e.* the poison, still exists unchanged; but in the tertiary symptoms, amongst which we place the 'venereal node,' it is completely transformed." We may naturally here inquire whether mercury has any thing to do with the production of nodes. I confess that I am disposed to think that a great deal of mischief is due occasionally to a mercurial course. "It is a fact," says Mr. Carmichael (Clinical Lectures on Syphilis, p. 10,) "that in those cases of syphilis treated without mercury, the secondary symptoms are particularly mild, and the bones are seldom or never affected." Yet Mr. Carmichael admits the occurrence of diseases of the bones as proper to the natural history of constitutional syphilis, succeeding to three out of the four kinds into which he divides primary venereal sores.[1]

[1] Exposure to cold, whilst suffering from other forms of syphilis, or when using, or after having used, mercury, are considered by many writers as the chief causes of these forms of diseases of the bones. These diseases are also much less frequent in hot countries than cold, and in those places where a systematic simple treatment without mercury is followed. They are said to be rare in Sweden, Denmark, Hamburgh, and Vienna, where such treatment is adopted. On the other hand, such diseases of the bones are unknown, except syphilis have existed in the constitution,

On the other hand, M. Ricord thinks that peculiarity of constitution, particularly the lymphatic temperament, a system depressed by dissipation, poverty, insufficient clothing, exposure to damp, &c. predispose to the occurrence of such forms of disease.

The treatment of the primary and secondary symptoms certainly has an influence over the occurrence or non-occurrence of the tertiary: "hence (says Ricord—Acton on Venereal Diseases, p. 390,) daily experience proves that if secondary symptoms be treated without mercury, tertiary symptoms will frequently follow, and that even when mercury is employed at the early period of the occurrence of secondary symptoms, the appearance of tertiary symptoms cannot be prevented: in such cases, however, provided the mercury has been used judiciously, they will be slight." (Acton, 390–1.) It does not follow that secondary symptoms should always precede the occurrence of tertiary, though in most cases they do. In many instances the disease passes on from the first order of parts affected to the third, without the intervention of any disease belonging to the secondary order. Thus I have seen sores on the genitals, and bubo (the first order of parts,) followed by nodes on the forehead, and on the shafts of the long bones (third order;) but no disease of the second order of parts, no secondary symptoms, properly so called.

"The rarest cases that we meet with are those which succeed to primary sores treated by mercury, when, after exposure to cold, from disease, or some exciting cause, tertiary symptoms declare themselves at first under a slight form, but successively increasing in severity." (Acton, 391.) In such cases we have a disease to contend with which, in the language of John Hunter, is compounded of syphilis, mercury, and the constitution. It must at once be evident that the treatment in such a case cannot in any way be specific.

Nodes, as they are commonly termed, result from an effusion or deposit between the periosteum and bone, the result of inflammation affecting one or both of these parts. Very commonly they are dependent upon a superficial inflammation of the bone itself. These effusions between the periosteum and bone may consist of serum, pus, or lymph. Again, nodes are produced by an effusion of a proper osseous matter, similar to the provisional callus first

though they are more frequent, perhaps, when mercury has been given for its cure if the patient be of bad habit of body, and exposed to cold during its administration. The same remarks will hold good with regard to syphilitic iritis.

thrown out in cases of recent fracture. Some nodes, very likely, are thus formed, since they present the feeling of a true enlargement of the bone itself. This is, most probably, the first effect of the inflammation of the surface of the bone, and the effusion of pus and serum are subsequent, supposing the inflammation to proceed unchecked by remedies.

Nodes may terminate in a great variety of ways. First by resolution, *i.e.*, by the subsidence of the inflammation of the bone and periosteum which produced them, and the absorption of the fluids or matter effused. In other instances, after the node has disappeared, the surface of the bone remains uneven, depressions exist in it, as though a portion of the bone had been eaten away; which is the case. This either arises from the pressure exercised by the effusion of the fluid between the periosteum and bone having produced absorption, or from the bone having become softened and carious from inflammation of the bony tissue itself. This mode of termination I have often seen exemplified where, after the disappearance of nodes, the surface of the bone has been found destroyed to some considerable extent: this is, no doubt, the mode in which the appearances witnessed frequently in diseased bones are produced. If the node has suppurated, and has either burst of itself or been punctured by a lancet, and the surface of the bone has been exposed, caries commonly follows to some extent, and the soft parts run into ulcers exceedingly difficult and sometimes impossible to heal. Ulcers of this kind, to which every variety of application has been used, at times get nearly well, and then suddenly begin to ulcerate again, having thickened edges, not unlike a primary venereal sore on other parts. In some instances, where osseous matter has been thrown out between the periosteum and bones, such effusion remains permanent; the inflammation accompanying, or dependent upon such state, subsides under proper treatment, but the deposit of osseous matter remains permanent, and produces one form of exostosis.

It is possible that venereal diseases of the bones and periosteum, but more particularly inflammation of the latter, causing effusion between it and the bone, may be mistaken for or confounded with periostitis arising from other causes, and more particularly where these are of rheumatic origin and character.

In drawing a differential diagnosis between cases of rheumatic periostitis and venereal periostitis, we should be guided by the history of the case, and the preceding occurrence of some of those

forms of constitutional syphilis which belong to secondary symptoms.

I am not aware either that periostitis, arising from causes not venereal, is complicated or succeeded by those diseases of the bones ending in caries, which we so commonly notice in the disease when it has a venereal origin. I do not think that the symptoms immediately preceding the development of nodes would enable us to form a very certain diagnosis of the nature of the affection: they are both preceded, for some time before the appearance of nodes, by nocturnal pains. The seat of the pains may in some measure guide us. In the rheumatic forms of disease the pains are situated in the joints or fleshy parts, as the shoulders; in those of venereal origin the pains are more in the shafts of the long bones, particularly of the radius, ulna, tibia, fibula, and in the bones of the head; in the rheumatic forms they sometimes, but rarely, affect the parts I have mentioned. Venereal nodes are, again, to be carefully distinguished from that uneven and irregular enlargement and softening of the surface of the bones, which is dependent upon rickets: the experienced Portal has shown that some forms of constitutional syphilis are marked by softening of the bones, without caries or exostosis. The first series of cases narrated in his "Treatise on Rickets," refers to venereal rickets, or rickets traceable to a venereal taint. He states that this species of disease may produce softening of the bones without caries; at other times it produces a peculiar brittleness.

The prognosis in venereal diseases of the bones and periosteum is not always favourable. If the health of the patient be unbroken by previous courses of mercury incautiously administered, we may hold out hope of recovery with some degree of certainty; but if the constitution has been impaired by poverty, debauchery, bad living, mercury, and syphilis, all contributing their part to the destruction of the patient, we have a disease to contend with which will sometimes baffle all our treatment, however skilfully it may be framed, and however unweariedly it may be followed out both by practitioner and patient. At any rate no rash promises must be made as to certain and speedy amendment, since relapses after partial restoration are so frequent.

The treatment naturally divides itself into constitutional and local. By the former we endeavour to correct the poisoned condition of the system from which the local disease had its origin, and upon which it depends. By the latter we endeavour to remove

the local effects which such a condition of the system generally has produced.

Most of the earlier modern writers on syphilis, from Hunter downwards, recommend full mercurial courses for the cure of syphilitic diseases of the bones and periosteum, such as those I have described. Amongst the more prominent of these writers, I may mention Hunter, Bell, and Swediaur. The latter says, "All syphilitic complaints of the bones require a complete mercurial course, continued longer than for the affections of the soft parts; for it is sometimes necessary to continue the use of mercury for three or four months, in order to obtain a radical cure." Bell says (p. 239, vol. ii.) "In every affection of the periosteum and bones, arising from the syphilitic virus, mercury should be given immediately, for it is upon this remedy that we chiefly depend." The same opinions will be found reiterated by all modern writers, from Hunter downwards, till the therapeutic effects of the hydriodate of potass attracted attention in certain forms of constitutional syphilis. We find Sir A. Cooper inculcating the same line of practice.

Venereal diseases of the bones and periosteum we have now learnt may, in many instances, be treated by iodine and the hydriodate of potass, as successfully as by mercury; at least it becomes our duty, generally speaking, in these affections, not to have recourse to mercury till we have tried these medicines and proved their inutility. Venereal nodes, too, will often return after they have been treated by mercury, and it then becomes certainly a much more prudent course to try the effect of the preparation of iodine than to submit the patient again to mercurial treatment. We may, perhaps, be enabled to judge from the history of a case which remedy is the most likely to benefit the patient: I believe it possible to point out the kind of case in which each might find its suitable application. If a patient present himself with a true venereal disease of the bones and periosteum, if the health be tolerably good, and if the primary or secondary antecedent venereal disease of such patient have been treated on the simple plan without mercury, I would recommend at once a mercurial course. He may, it is true, be cured by the hydriodate of potass, but we shall be longer about it; he will not be cured as well; and it will be at much greater expense of pain to the patient. If, again, in such a case, the inflammatory action accompanying the disease be very acute, the parts very hot and tender to the touch, and the integument covering the

bones itself inflamed, mercury is still more strongly indicated; the patient should be got as quickly as possible under its influence, not, perhaps, so much with the view of specifically curing his syphilis, as with the intention of controlling inflammation by the aid of mercury. We know how efficacious mercury is in the treatment of many forms of acute disease, and more particularly when acute inflammation of this character is the result of a venereal taint. The circumstances which are to lead us to select mercury as a remedy in venereal diseases of the bones and periosteum are, an unimpaired constitution on the part of the patient, and his previous syphilitic diseases having been treated on the simple plan without mercury. Where diseases of the bones and periosteum occur in patients whose health is either naturally delicate, or which has been rendered so by protracted venereal diseases and repeated courses of mercury, I would not advise mercury. We may, possibly, by having recourse to it under such circumstances, benefit the patient for a short time, but the disease is very liable to return, and the constitution will be very probably utterly destroyed. In a case of this kind, we may, with every prospect of advantage to the patient, commence the constitutional treatment of the disease by the hydriodate of potass in three or five grain doses, three times a day, in an ounce of cinnamon or peppermint water, the compound infusion of gentian, or the compound decoction of sarsaparilla. There commonly exists a preternatural irritability in the bowels of patients who have frequently had recourse to mercurial courses; and hence it becomes very necessary to guard against any ill effects (such as pain or purging) which the hydriodate of potass may produce: for this purpose a few minims of the tincture of capsicum, with or without laudanum, may be added, according to circumstances, to the vehicle in which the potass is given. The dose of the hydriodate must be gradually increased from three to five grains every three or four days, till the disease give way, or some circumstance occur which will prevent us either continuing its employ, or requiring a diminution in the dose.

Almost all the varieties of venereal nodes are, on their first appearance, tender to the touch: the first effect of the hydriodate is a diminution of this tenderness, then diminution of the node itself, which, in many cases, gradually and entirely disappears under the use of this salt. If, after the continued use either of this medicine or mercury for a reasonable length of time, the node have diminished to a certain point, and there remains hard and stationary,

without tenderness, we are to look upon this as effused osseous matter, constituting a true exostosis, which is hardly likely to be removed by a further continuance of medicine.

The local treatment of venereal diseases of the bones and periosteum is also of great importance. As many of them are ushered in with symptoms of inflammation more or less acute, an antiphlogistic local treatment, suited to the degree of inflammation present, should be adopted; several relays of leeches should be placed over the node till all tenderness shall have disappeared: these are to be succeeded by blisters, which should be dressed with the stronger mercurial ointment. The continued application of blisters, even after all constitutional treatment appears to have lost its effect, will often succeed in reducing very considerably the size of a venereal node. Many other remedies may be used, with the view of dispersing a node when perfectly chronic, *i. e.* when all symptoms of inflammation have disappeared: amongst these may be mentioned frictions with mercurial ointment and camphor, the hydriodate of potass ointment, the application of the tincture of iodine, or the solution of iodine in the hydriodate of potass, so generally used, and with such signal success; pressure and strapping with the emp. ammoniaci cum hydrargyro, which I have so usefully employed in the same way in affections of the testes which succeed to gonorrhœa. A question of great practical importance remains to be here considered, in reference to the treatment of collections of fluid which succeed to or accompany venereal ostitis and periostitis. If fluctuation be evident in a tumour of this kind, and no redness or thinness of the integument have taken place, I do not think any author imprudent enough to recommend the puncture of such a tumour, with a view of discharging its contents: should we do so, we are very likely to produce caries and exfoliation of the bone beneath, the extent and consequence of which it is impossible to foresee. Sir A. Cooper mentions the case of a person who died in consequence of exfoliation produced by the opening of nodes on both his tibiæ. In these cases, we are on no account to lay open these collections of fluid, but by a perseverance in the constitutional method of treatment, and the repeated application of blisters, to endeavour to procure absorption of the fluid effused. Where the existence of pus is rendered still more certain by the redness and shining appearance and thinning of the integument covering the tumour, I cannot follow the advice of Sir A. Cooper, "to make an incision down to the bone." I would rather press the impor-

tance of the advice given by Mr. Colles in reference to this point. "Some," says Mr. Colles, "have proposed the early opening of the tumour, and the evacuation of all the contained fluid. To this proposal I would object, that in some cases this particular practice is followed by painful suppuration, and by very copious discharges, and not unfrequently by caries and tedious exfoliation of the bone. It seems preferable in all cases to try the local and constitutional effects of mercury and iodine, and by means of these to endeavour to avert suppuration and ulceration. This rule should be most strictly adhered to in the case of nodes on the forehead, or on any exposed part of the body; for when a node has been of long standing we often find that a sort of chronic suppuration is established, the integuments become thin and sometimes red; at other times they are reduced to the utmost degree of thinness, and yet may retain their natural colour, so that the surgeon is actually tempted to give vent to the fluid by the puncture of a lancet. Yet if he will but resist the temptation which the very thin state of the skin offers to him to open it, and will still apply repeated blisters, he will have no reason to lament his forbearance; for as soon as the mercury or hydriodate of potass comes to act favourably on the system, he will perceive that the fluid begins to be absorbed, and that this process will finally be terminated by the adhesion of the skin to the surface of the bone. From the depressed position of the skin, after adhesion has taken place, and the sunken unequal surface which the bone presents to the touch, we are convinced that an absorption of the bone has gone on to some depth."[1]

In such cases, then, it might be well, if much distention be present, not to lay the abscess open with a lancet, but to puncture with a very fine trocar. This mode of practice will relieve the distention, and give time for other treatment to be brought to bear; at the same time the puncture will be so small that no air can possibly be admitted, the surface of the bone will not be exposed, and the risk of caries and exfoliation will certainly not be increased.

[1] Colles, p. 187.

CHAPTER XXX.

ON SYPHILITIC DISEASES OF THE LUNGS.—SYPHILITIC PHTHISIS.—CHLOROSIS.—CACHEXIA.

THERE can be no doubt but that a profound alteration in all the humours and solids of the body, takes place in many constitutions in the latter stages of constitutional syphilis: at such periods the body wastes, the appetite is lost, the patients assume a white cadaverous appearance, the strength diminishes, and night sweats, diarrhœa, and cough set in. If this state continue, uninfluenced by treatment, a fatal termination may take place, of which I have seen some instances.

To this array of symptoms, the term "Syphilitic Phthisis" has been given. The name also of "Syphilitic Chlorosis" has been applied to similar constitutional states due to the same cause. The older writers, particularly Portal, Bell, Lagneau, and others, believed in the existence of a true venereal phthisis. That patients may die of wasting of the body, with cough, and night sweats, and even spitting of blood, as a consequence of prolonged syphilis, is quite certain; but whether a true "tuberculosis" is ever produced, or even developed by syphilis is a matter of great doubt. Hunter says, "This disease seldom or ever interferes with other disorders, or runs into or terminates in any other, although it has been very much accused of doing so." The cases recorded by authors of the cure of syphilitic phthisis by courses of mercury, and other modes of anti-venereal treatment, were clearly not cases of "tuberculosis;" for the treatment which is said to have been successful in such states, is clearly the last which would be applicable or beneficial in tuberculosis.[1] No one would think of prescribing mercu-

[1] The syphilitic virus is probably never converted into tubercle. Mr. Ancel ("On Tuberculosis," p. 391,) says, "The only point of view in which the doctrine can be held is the absolute transmutation of the syphilitic poison into the tuberculous element of disease."

"There is no fact or experiment which conclusively proves that a single case of tuberculosis was ever produced by syphilis alone. . . . . At the same time, syphilis, by its deleterious effects on the constitution of the parent, may probably weaken the reproductive faculty, and lead to the conception of children, who, from

rial inunctions, &c. in the latter disease, or expect such a treatment to be successful.

The assemblage of symptoms I have mentioned as constituting what has been termed "syphilitic phthisis," are due to the existence of a syphilitic taint in the system, more particularly affecting the blood and humours of the body, and are not commonly met with apart from some other local and unequivocal symptoms (either present or immediately preceding) of syphilis, such as old secondary ulcers, diseases of the bones, throat, or larynx. It frequently happens that the local disease, or previous history of the patient, is not sufficient to account for the profound cachexia under which the patient labours. Manifestations of constitutional syphilis are frequently met with of a very formidable character, and of long standing, where the general health or constitution of the patient has suffered very little: in other instances, this chlorotic condition is very quickly induced, and appears to arise from a more direct action of the syphilitic poison upon the blood itself: hence the pallid countenance, the thin, weak, frequent pulse, and the muscular weakness.

It will be seen that this state of constitution sometimes comes on very quickly, and therefore is not, in all instances, due to the time a syphilitic taint has been in existence, but to a more immediate action of the poison on the blood, instead of on the skin, bones, or other parts.

If cough or diarrhœa be present, the condition of the patient resembles very much one of phthisis; but auscultation must soon clear up any doubt as to the condition of the lungs themselves.

If such a state of constitution be due to the poison of syphilis alone, it is quite clear that those remedies which will neutralize or eradicate the poison, are the only ones from which the patient is likely to derive permanent benefit, to whatever state of weakness he may be reduced; and experience bears out the fact of the failure of all remedies except those I have mentioned. I have frequently known patients put on courses of cod-liver oil, and removed to the sea-side, and to other climates, without the slightest benefit; when they have recovered completely and rapidly on being submitted to a methodical and properly framed anti-syphilitic treatment, more particularly one by the moist mercurial vapour.

There are, however, some forms of constitutional syphilis which resemble very closely consumptive diseases from other causes; and these are syphilitic ulcerations of the windpipe.

poverty of blood and debility of organization, are predisposed to tuberculosis." (Op. cit., pp. 391–92.)

Case XXV.

A middle aged female was admitted into the Queen's Hospital, under my care, in June, 1848. She had three years before been treated, as an out-patient, for primary venereal sores, and in the interval had had ulceration of the throat, and some pustules upon the skin, which I did not see. When admitted she was much emaciated, had profuse night perspirations; expectorated large quantities of purulent matter streaked with blood, had completely lost her voice, and the larynx was enlarged, tender, and painful. I drew the tongue forwards, and passed into the larynx a bent piece of whalebone armed with sponge, which was soaked in a solution of nitrate of silver, and directed the vapour of one grain of the iodide and a scruple of the bisulphuret of mercury to be directed into the throat every morning. The gums were made very sore after the fourth application, and the remedy was used less frequently. No alteration was made in the treatment, and at the end of six weeks she was discharged in tolerable health, having recovered her voice, though it remained hoarse, and having lost entirely the night-sweats, the cough, and the expectoration.

There could be no doubt as to the nature of this case; it was one of syphilitic ulceration of the larynx; but if the previous history of the patient had been unknown or misstated, there must have been great difficulty in discriminating between such a disease and one of ordinary laryngeal phthisis.

Drs. Stokes, Graves, and Munk, have spoken of syphilitic diseases of the lungs, but I have seen no facts recorded which prove the production of a true tuberculosis by syphilis. I have seen no case of the syphilitic tubercle developed and softened in the lungs, and cannot suppose that such cases can be frequent, since amongst the great number of syphilitic patients daily treated at the Queen's Hospital, where every case in my practice is carefully recorded, none have been met with. Should such cases occur, I know of nothing that would enable us to distinguish them from cases of ordinary tuberculosis, except the previous history, and concomitant state of the patient; since, apart from such considerations, both the rational and physical symptoms of tuberculosis and syphilitic tubercle would most closely resemble each other.

The remedies best suited to the forms of disease I am considering, are the iodide of potassium, iron, the extract of opium, the cold infusion of sarsaparilla in lime water, sarsaparilla broth, the moist mercurial fume, residence in a fresh, pure, dry atmosphere, and the baths of Kreuznach.

CHAPTER XXXI.

ON THE TREATMENT OF SYPHILIS IN PREGNANT WOMEN, NURSES, AND INFANTS.

SYPHILIS may be communicated from the mother or father to the ovum, fœtus in utero, or the infant, in the following ways:

1st. The Virus may be transmitted with the semen by cohabitation,[1] the father having suffered from syphilis, the mother never; or the father may be healthy and the mother diseased; the fœtus is then contaminated by the blood of the mother, the father being healthy; or, again, both these causes may be combined.

2d. The infant may contract disease during labour, by coming in contact with parts of the uterus, vagina, labia, &c., which are the seat of various forms of venereal taint.

3d. The infant may become diseased after birth through the medium of the milk, &c., the mother or nurse being affected; the breast being the seat of local symptoms or not.[2]

The disease may also be propagated by a diseased child to a healthy nurse; and the latter may again give it to a healthy infant, "without," according to Bertin, "the nurse *appearing to be infected.*"

Cullerier, in a memoir published in 1815, has endeavoured to lay down some rules to guide us in reference to this subject.

1st. If the breast of the nurse and the mouth of the infant are only, and at the same time, diseased, the question is one of doubt in which the disease originated. 2d. If the breasts alone are diseased, and if the infant has symptoms in other parts besides the mouth, it is very probable that the latter has been the first infected. 3d. If the infant has the mouth alone diseased, and the

[1] See Bertin (Physician "en chef" of the Venereal Hospital, Paris) Traité de la Maladie vénérienne chez Enfants Nouveau-nés, les Femmes encientes, et les Nourrices; Paris, 1810.

[2] Contamination by means of the milk after birth is denied by Dr. Egan, though admitted by Mr. Whitehead, Mr. Erasmus Wilson, and many foreign writers. How can diseased blood produce healthy secretions?

nurse has other symptoms besides those of the breast, it is most probable the infant has been diseased by the nurse. 4th. If the nurse has general constitutional symptoms, and the infant only local symptoms, the disease probably originates with the nurse. 5th. If the infant has general constitutional symptoms the disease is most likely hereditary.

This point is not always easy to solve, but the rules given will be found, in most instances, correct, and are very useful in guiding us in the formation of a correct diagnosis.

I should remark, that it is generally supposed a diseased infant cannot affect its own mother: the case recorded below, from my own practice, amongst many others, favours this view. This remark was originally made by the late Dr. Colles of Dublin,[1] and is strongly supported by Dr. Egan. I have seen no case to disprove this.

Case XXVI.

A patient, whose case is already referred to, was admitted under my care at the Queen's Hospital, suffering from a pustulo-crustaceous syphilitic disease of the skin of very formidable character. He was there treated and cured. His wife brought her infant to me covered with scaly blotches, whilst the husband was in the hospital: the child was plump, and apparently healthy when born, but a few weeks afterwards these patches broke out, and the health began to decline. The mother presented no evidence of disease, and the breasts, as well as the infant's mouth, were free from ulceration. She was extremely anxious to be examined, fearing she might be labouring under some affection of the parts themselves. I instituted the most careful examination with the speculum, not only once, but four or five times, and could never discover the least local disease, either in the vagina, uterus, labia, nymphæ, or the folds of muco-cutaneous membrane surrounding the clitoris, &c., &c. The child, in this instance, was alone treated, and cured. I purposely abstained from treating the mother, whom I had watched for nearly two years. She has never suffered from a syphilitic symptom in any form.

This appears to have been a case of syphilis in the infant, transmitted by the father to the ovum or fœtus in utero; the mother never having suffered from disease, and never having been treated under the suspicion that she was diseased. I purposely abstained

[1] On the Venereal Disease, and on the Use of Mercury, 1837, p. 304.

from treating her to see whether syphilis would, sooner or later, develope itself. Up to the present moment, two years from the birth of her child, she has remained perfectly healthy. Mr. Acton introduced to the Medical and Chirurgical Society, May 13th, 1845, a case of similar character.

Case XXVII.

M. H——, nine weeks old, was placed under Mr. Acton's care, on account of an eruption, chiefly papular, over the whole body. The voice was hoarse, and there was slight discharge from the nose; the palms of the hands presented a scaly copper-coloured eruption. The mother stated she married four years ago, became soon afterwards pregnant, and at the full time gave birth to a dead child. During the following year she miscarried. On the occurrence of the third pregnancy, the child, the present patient, was born at the full time, perfectly healthy. About the third week, spots were observed on the genital organs. No symptom, either of primary or secondary disease, could be discovered in the mother. The father, about four years ago, contracted chancres, was salivated, and secondary symptoms followed. He again took mercury, and, fancying himself well, married, and denies having had any primary symptoms since, although he has occasionally seen white spots on his mouth and tongue.

This is a second example of one mode in which syphilis may be produced in the infant; by a constitutional taint in the father, and no evident disease in the mother. Many of the gentlemen who took part in the debate on this case, Dr. King, Dr. Merriman, Mr. Arnott, Mr. Wade, and others, alluded to similar cases. The one I have brought forward from my own experience was watched for so long a period and examined so carefully and so repeatedly, that I believe there can be no doubt of this occasional and perhaps frequent origin of hereditary disease.[1]

If a female not constitutionally affected at the time of her delivery be labouring under a primary venereal disease, either in the shape of ulcers or discharge, it is not improbable that such disease may be communicated to the infant during its birth, and thus a primary disease be produced in the offspring. These cases are, however, rare, and persons of the greatest experience, amongst

[1] See the Lancet, Jan. 7, 1845, No. 1136.

whom may be mentioned M. Gibert, have hesitated to determine whether the ulcers or discharges with which some new-born infants born of parents labouring under primary venereal diseases are affected, are due to a primary infection, or to a constitutional taint contracted "in utero." Bertin, to whom we have already alluded, has, however, recorded many cases of children born of women labouring under primary symptoms, and not evidently constitutionally diseased, who have presented, shortly after birth, ulcers, bubos, or discharges which had all the characters of primary venereal diseases, and were, in all probability, due to infection during the progress of labour.

Two forms of syphilis, however, in the infant, are decidedly primary, due to direct contact or infection, and not dependent upon a constitutional disease. These are purulent ophthalmia, and ulcers in the mouth of an infant who has taken the breast of an infected nurse, whose nipples present marks of ulceration. The former of these is due to contamination during parturition, the second to an infection contracted after birth. It must not be supposed that the purulent ophthalmia of infants is invariably a syphilitic disease. It is not so. It occurs where the female has never had primary sores or vaginal discharges of any kind. It is, again, due to leucorrhœal or irritating secretions not of a venereal character, at least, children born of parents so diseased have occasionally been affected with purulent ophthalmia; and it happens under a third form where the mother has decided gonorrhœa, ulcers, or glandular erosions of the os uteri. In the latter case it must be looked upon as a primary venereal symptom, at least caused by the circumstances on the part of the mother which we have mentioned. "I do not pretend to deny," says Gibert, "that purulent ophthalmia may not recognise as its cause a local venereal disease on the part of the mother, but I say, that in the actual state of science, this phenomenon alone is insufficient to characterize syphilis." When it occurs in infants born of parents infected with syphilis in the way I have mentioned, it is difficult to assign to it any other cause.

Primary venereal diseases in the infant produced by disease in the passages of the mother are, at least, rare diseases. Drs. Maunsell and Evanson state (Diseases of Children, p. 351, ed. 4,) that they do not remember a case of this nature. Their experience corresponds with mine. I have now under my care an infant of fourteen weeks old, where neither father nor mother have had any trace of disease for five years: the father was diseased six years

ago, the mother never. She has had three dead children prematurely born, since her marriage, and this, her first living child, exhibited symptoms of syphilis at five weeks old, commencing with snuffling, discharge of pus and blood from the nose, subsequently a pustulo-papular eruption, soon becoming scaly.

The symptoms are, as we have shown, of two kinds, primary, and secondary or constitutional; the former rare, the second more common. The former consist in purulent ophthalmia, and ulcers of the mouth, to which some have added chancres or ulcers in the parts of generation or elsewhere, discharges from the vagina or urethra, and even bubos. The constitutional forms of disease consist chiefly in affections of the skin, which are the most frequent, and belong to the various forms of the "Syphilida" already described. Affections of the bones are very uncommon, although Bertin has given a case of disease of the bones and periosteum in an infant thirty-five days old.

A characteristic snuffling is one of the most marked symptoms of infantile syphilis. "The puckered mouth, the position of the very characteristic eruption round the lips and anus, in addition to the peculiar and fissured appearance of the surface from which the scales have faded, will seldom, if ever, fail to convert a suspicion of the disease into positive certainty. Condylomatous excrescences from the margin of the anus have never, in any of the cases, accompanied the earliest development of the syphilitic affection, but were always secondary, being observed in those children only whose primary affection was neglected or incompletely eradicated. When the eruption occurring on the nates and face, in the first few weeks of life, had been promptly treated, no condylomata appeared on the anal margin, at least so long as the children were kept in sight. But, on the contrary, when the eruptions were neglected, condylomata were the almost certain results."[1]

Occasionally infants at the moment of birth present the symptoms of syphilis, and in addition to such symptoms, are shrivelled and emaciated, the skin hanging in folds in different parts of the body. It more frequently happens that these symptoms are not manifested till many days, weeks, or even months after birth. More commonly disease shows itself from the third to the sixth week; it may be however earlier, more frequently later. "In the majority of infants confided to my care, the disease has not appeared till

[1] Dr. Golding Bird; Guy's Hospital Reports, April, 1845.

the first, second, or third month, and frequently much later."[1] "The two physicians who had preceded me," continues this writer, "have, with me, observed that infants born of infected parents, have not presented the symptoms of syphilis till many months after birth, and sometimes not till they were weaned, and that up to this period they had appeared in the best health." The records of the Venereal Hospitals, "du Midi" and "Vaugirard," have shown that some infants born of diseased parents have never had symptoms of syphilis. In some instances these were the offspring of parents who had undergone treatment during pregnancy; or they were recently affected. In a second class, much smaller, the parents have never been treated, and yet the infants, watched for upwards of a year, had never shown any symptoms of venereal taint.

Many interesting questions propose themselves for our consideration in reference to the treatment of pregnant women, nurses, and infants.[2] We will consider, first, whether a pregnant female presenting the symptoms of primary or constitutional syphilis is to be treated, and how she is to be treated. Some have supposed that a mercurial course predisposed a pregnant female to miscarriage. This, however, is incorrect. Bertin has stated (Op. cit. p. 169,) that pregnant females with constitutional syphilis much less frequently miscarry when they are submitted to an appropriate treatment, than they do if the treatment be postponed till after delivery. The disease is here more to be dreaded than the treatment. If the treatment be adopted and conducted cautiously, there is very little to dread, either on the part of the female, or the fœtus. The

[1] Bertin, op. cit., p. 97.

[2] Infants conceived and developed in the womb of a female suffering from constitutional syphilis seldom live beyond the period of the first dentition; if they survive this period, their health is generally delicate and precarious, in spite of the most rational treatment to which they may be submitted. See "Lagneau," Ex-Chirurgien de l'Hôpital Vénériennes, Syphilis de la Femme enciente; Paris, 1812, p. 283.—See also Professor Paul Dubois' paper on the subject in the "Annales de la Syphilis," Jan. 3, p. 78. Syphilis considered as one of the possible causes of the death of the fœtus.—Also the same paper, in the "Gazette Médicale," Août, 1850. The learned professor comes to the following conclusions: 1. That the presence of pus either diffused or circumscribed in the thymus gland of new-born infants, who have died with other symptoms of a syphilitic taint, is not to be considered as a coincidence; but as a pathognomonic symptom of syphilis. 2. That such a pathological condition, in the absence of any other evidence of the cause of the death of the fœtus, fully warrants a specific treatment of the parents, as the only means of averting a repetition of the same results.

mother is very likely to be cured, and a healthy child born. If it be neglected, premature labour, with death or formidable disease in the child, are almost certain. For confirmed constitutional syphilis, or well-marked primary sores occurring in pregnant women, a modified treatment, the effects of which are to be carefully watched, is to be adopted, and persevered in till the symptoms have yielded. If mercury be used, the remedies best suited to these forms are frictions of small quantities of mercurial ointment, either upon the thighs, or in the axilla, with the mercurial vapour bath. These remedies are safer than internal mercurial remedies, which, if used, should be of the mildest character. In the advanced periods of pregnancy, great caution must be observed, and we would then limit the general treatment to frictions only. The remedies must be suited to the form and variety of the disease with which we have to contend, according to the rules already laid down. A plan of treatment must be framed to suit the particular circumstances of the case, whether the disease be in the throat, bones, or skin, and the nature of the eruption, whether pustular, tubercular or scaly.

It is certainly the correct practice to submit a pregnant woman affected with syphilis to an immediate and direct specific treatment. All experienced modern writers are agreed on this point. Mr. Vidal says, "When I directed the department of the nurses at the 'Lourcine' Hospital, I treated syphilitic pregnant women, in the same way as those which are not diseased:" the same view is supported by Dr. Egan.

Is the father to be treated for syphilis in the absence of all symptoms, if his wife, also apparently healthy, miscarries, frequently, or gives birth to children decidedly syphilitic? Certainly, if the father have ever had syphilis. I have already alluded to a case of this kind; I mention another.

Case XXVIII.

A gentleman married, after having been free from all symptoms of syphilis for some years. His lady aborted of her first child, and of her second; the cause was not suspected. The third was born alive, but at six weeks old, had snuffling, iritis, and condylomata about the anus. It was cured by mercurial frictions. The lady aborted of her fourth child; the fifth and sixth both had syphilitic symptoms. The mother had never any symptoms of syphilis. She was carefully and repeatedly examined.

There can be no question about the propriety of submitting both parents to specific treatment in all such cases.

"Observation has taught me," says Bertin, "that diseased pregnant women more frequently miscarry when they have not been submitted to any treatment, than when they have been treated during pregnancy, and that when this event happens during the course of treatment, it depends commonly either upon the disease itself, badly treated, or treated too late, upon the state of cachexia or weakness to which the patient has been reduced by her disease, or upon the excesses she has committed during her pregnancy."

The result of modern experience shows that a pregnant female constitutionally diseased may be treated with safety, and with a strong probability of cure both to herself, and the eradication and prevention of disease in the fœtus in utero.

It is not prudent to commence the full treatment of a pregnant female during the ninth month of her pregnancy. At this period a palliative treatment only should be adopted: if a mercurial one, it should consist in frictions with small quantities of mercurial ointment every two or three days, leaving the full treatment to be commenced a month after delivery.

If a female contract primary sores during pregnancy, two things are to be feared: constitutional infection both in herself and infant, and the contamination of the infant during parturition, a circumstance, though rare, sometimes happening. If the primary disease occur during the earlier months or middle of pregnancy, the female is to be fully treated, observing the cautions already laid down in reference to treatments during pregnancy, whether mercurial or not. Mercurial inunction is here also the best mode we can adopt if mercury be indicated.[1]

When a female is affected with primary ulcers on the genitals near the time of parturition, they must be destroyed by some appropriate caustic, to protect the infant from infection on the one hand, and the accoucheur or midwife on the other. I have seen three or four instances of constitutions irreparably broken in medical men by syphilis, contracted from attending a female, during parturition, with syphilitic affections of the vagina or os uteri.

The best plan of treating infantile syphilis is that by frictions

[1] "Je pense, comme quelques practiciens, que le traitement par les frictions mercurielles est celui qu'il convient le plus généralement d'employer dans la syphilis primitive des femmes grosses." (Baumès; Précis théorique et pratique sur les Maladies vénériennes; Lyon, 1840.)

with mercurial ointment, in the way recommended by Sir B. Brodie.[1] "I have provided a flannel roller, on one end of which I have spread some mercurial ointment, say a drachm or more; and I have the roller thus prepared, applied, not very tight, round the knee, repeating the application daily. The motions of the child produce the necessary friction, and the cuticle being thin, the mercury enters the system. This causes neither griping nor purging; in a child it does not even, in general, cause soreness of the gums; but it cures the disease. Very few children ultimately recover, to whom mercury has been given internally; but I have not seen a single case in which this other method of treatment has failed."

[1] On the Administration of Mercury in cases of Syphilis, "Lectures on Pathology and Surgery," p. 248.

CHAPTER XXXII.

OF THE EMPLOYMENT OF PARTICULAR REMEDIES IN THE TREATMENT OF CONSTITUTIONAL SYPHILIS.

THE MERCURIAL VAPOUR BATH.

THE patient is placed on a chair, and covered with an oil-cloth, lined with flannel, which is supported by a proper frame work. Under the chair are placed a copper bath, containing water, and a metal plate, on which is put from one to three drachms of the bisulphuret of mercury, or the same quantity of the gray oxide, or the binoxide. Under each of these a spirit-lamp. The patient is thus exposed to the influence of three agents, heated air, common steam, and the vapour of mercury, which is thus applied to the whole surface of the body in a moist state. After the patient has remained in the bath from five to ten minutes perspiration generally commences, and by the end of twenty or thirty minutes, beyond which I do not prolong the bath, it is generally excessive. The lamps are now removed, and the temperature gradually allowed to sink; when the patient has become moderately cool, the coverings are removed, and the body rubbed dry; the patient is suffered to repose in an arm-chair for a short time, during which he drinks a cup of warm decoction of guaiacum or sarsaparilla.

The apparatus requires some modification and management to particular cases. Where it is wanted to induce a quick and decided action, the whole power of the bath should be brought into operation, and the largest quantity of mercury should be employed. In rapidly-spreading ulcers this is required. Again, in chronic skin or throat diseases, where a powerful action would rather oppress the patient than cure his disease, the power of the bath should be modified, and not so great a heat or so much mercury employed. This is accomplished by using smaller spirit-lamps, or, when perspiration has once been induced, by the removal of one lamp, leaving the patient thus exposed for a time to the mercurial vapour

alone. This should be done where the patient has been broken down by long-continued disease, in bad or weak subjects, or where a more prolonged action is required to eradicate the more deep-seated effects of the venereal poison, as in diseases of the bones, or indurations on the penis. Each particular case would require a greater or less modification of this kind. The form of mercurial employed is also of consequence. In skin diseases the bisulphuret is to be preferred, in diseases of the throat or nose the gray oxide, or binoxide is better, because the patient can bear the head immersed without sneezing or coughing, which he cannot do when the bisulphuret is used.

I am in the habit of using four mercurial preparations for the baths; the bisulphuret of mercury, the binoxide of mercury, the gray or black oxide, and the iodide. These may be used singly or combined in different ways, to suit the peculiarities or emergencies of each particular case. The first three preparations are milder than the last, and from half a drachm to four drachms may be used for a bath with perfect safety. In one case half an ounce was used for each bath, and two applications were sufficient to bring the system fully under the influence of the remedy. The iodide must be used in smaller quantities: nearly the whole of this preparation is rapidly converted into vapour, and, unlike all the other preparations, leaves scarcely any ash behind it. From five grains to half a drachm of the iodide is sufficient, and it is better to use it in small quantities, mixed with a larger quantity of either of the other preparations. In affections of the testes (sarcocele) and of the bones (the various forms of ostitis, or periostitis) a combination of a scruple of the iodide, and one or two drachms of the bisulphuret or binoxide would be a proper form. For local application to the cavities of the nose or mouth, a few grains only should be employed, as the vapour of the iodide of mercury is more irritating and more powerful than that of either of the other preparations I have mentioned.

A short preparatory treatment should be adopted before using the baths. The bowels should be kept free, and the use of wine, spirits, &c., prohibited. The patient should be free from fever, the tongue clean, and the freedom from organic diseases, such as those of the heart and lungs, more particularly, should be ascertained. Should such, or other complications be present, they might require modifications of treatment, but would not prevent

its employ, as this is not only the most certain, but the safest way of curing all forms of constitutional syphilis.

This plan of treatment does not commonly require that the patient should forego his ordinary occupations of business, or that he should be confined to the house during its use. It must be admitted that its effects would be accelerated by confinement to bed, or to a couch in a moderately warm room; but this is by no means imperative, and I have very rarely advised it, except in such cases where exposure or exercise would be positively mischievous, as in cases of sloughing, or rapidly spreading ulcers in the throat or elsewhere.

The diet should be light, nutritious, and unstimulating; milk, chocolate or cocoa, night and morning; animal food for dinner, with weak wine and water. Where the patient has been reduced by mercury given internally, or by a combination of syphilis and mercury, the diet may be more nutritious; but stimulants should be avoided. Smoking must be prohibited, particularly in diseases of the throat and nose.

In a great majority of cases the moist mercurial vapour, employed as I have directed, is capable of curing the disease without the assistance of internal medicine; but the cure is generally expedited and rendered more certain by the administration of the latter in small quantities. The treatment is always assisted by the decoction of sarsaparilla or guaiacum, drank warm night and morning, and immediately after leaving the bath. I prefer the latter, the compound decoction, made according to the formula of the Edinburgh Pharmacopœia. Where other medicines are required to assist the treatment, and I allude particularly to the various preparations of mercury, it is surprising how small a quantity is required when the patient is using the vapour. I have known several instances where diseases which have been rebellious to large quantities of mercury, given for long periods, yield immediately the baths were employed. The effects of mercury upon the system become very quickly manifest under the influence of the baths, when the system had previously resisted this influence. When I employ mercury internally, during the use of the baths, it is either under the form of the biniodide, or bichloride given in solution in small quantities, not exceeding the twentieth of a grain for a dose. The use of this medicine in drachm doses of the ointment in form of friction, in five grains of blue-pill or calomel, two or three times a day, under the old plan of treating venereal diseases

by mercury, can never be required, except it is wished to break up the health and constitution of the patient. How many have never recovered from internal mercurial treatments of this kind. I never saw the most delicate patient, either male or female, whose health was injured for one hour under the plan I recommend, and I have very rarely seen a disease that has not been cured. The experience derived from the treatment of many thousand cases warrants me in speaking thus positively on the subject.

The time occupied in the cure of venereal diseases by the mercurial vapour-bath is vastly less than that consumed by any other kind of treatment: its effects are commonly immediate, one full bath very frequently making at once an impression on the disease. Where the hair has been falling rapidly, one bath has arrested this: ulcers which have been rapidly spreading have been rendered stationary by one bath. After two or three baths, the improvement is in most instances marked; and the cure is effected in one fourth, or even one sixth of the time required for the success of ordinary treatments. The nature of the cases determines the time occupied in the cure. In superficial skin diseases, or superficial ulcers of the nose and throat, the cure is very rapid. I have constantly known affections of this kind entirely cured in a fortnight or three weeks, with pleasure rather than inconvenience to the patients. In enlargements of the bones and testes, indurations of the penis, persistent induration of the cicatrix of a primary sore, the cure is necessarily more tedious; the change of structure produced in such diseases must have time for removal: nevertheless, in these cases, which require months of treatment, under common circumstances, and which are not unfrequently considered or given up as incurable, the moist mercurial vapour will do more in a month than any other treatment in six. I have known cases of induration of the penis, removed in three or four weeks, which have not shown the slightest disposition to amendment after months of ordinary internal treatment.

All authors and all surgeons conversant with the treatment of syphilitic diseases, admit the frequency of relapses under ordinary treatments; hence constitutional diseases are to be feared as the result of primary ulcers; and when one form of constitutional taint has been apparently cured, it is commonly, after a time, succeeded by another. Thus venereal diseases run through those phases or grades which have been termed primary, secondary, or tertiary; and it has been a primary object in all plans of treatment to have

recourse to those which, whilst they cure the disease then present in the best manner, and with the least risk, shall prevent the occurrence of future diseases under another form. Relapses will occasionally occur under all forms of treatment, but I will undertake positively to state, that they are by far less frequent and important under this plan of treatment than any other; and when they do occur, are trivial, and yield with great certainty to a second application of the vapour.

The effects of the mercurial vapour-bath upon the patient vary under different circumstances. If the general health of the patient be apparently good, and we have to control a single isolated symptom of disease, such as a primary sore, an enlarged testis, or an indurated cicatrix, and the baths be used too frequently, the patient would become a little languid, and probably a little thinner; this would be avoided by properly timing the intervals between the baths. Should the patient be labouring under general constitutional taint, and exhibit as local symptoms loss of hair, sore throat, ulcers of the nose, or skin diseases, he almost invariably gets fat under the treatment. The mouth is commonly affected, after using four or six baths, more quickly if the head be immersed, which is better: some patients can bear the head in the bath for five, ten, or even twenty minutes without inconvenience: patients vary in this particular; and it depends very much on the form of mercurial employed. The gums, when affected, are red, elevated, and tender, but the baths never produce salivation, or ulceration of the mouth.

Some forms of constitutional syphilitic diseases more readily yield to the use of the vapour than others. Some are cured with an extraordinary degree of rapidity, and are perfectly cured, which is proved by their not having relapsed, or presented a fresh venereal symptom after many years. These forms are superficial diseases of the skin, loss of hair, superficial ulcerations of the nose and throat.

Some varieties require a longer treatment, as diseases of the deeper-seated parts of the skin, some forms of ulceration, diseases of the testicles and of the bones.

To all forms of constitutional syphilitic disease, the treatment by vapour is applicable, and beyond all doubt the most speedy, certain, and safe remedy that can be employed; yet there are some forms of disease which yield with greater rapidity than others. That which gives way with the greatest difficulty is the induration which succeeds to the healing of a primary sore. I do not mean

that soft fulness which is sometimes found in such situations, but that cartilaginous hardness which is met with under the skin, and which is sure, sooner or later, to end in local or constitutional mischief. I have seen cases which have resisted all modes of treatment but the baths; to these they yield but slowly, but they do yield, and with certainty, after other plans of treatment have been followed for months without success, or with but partial amendment.

One or two objections have been raised to this plan of treatment by the reviewers of the last edition of this work. These are easily answered, and would never have been made had those gentlemen been familiar with its practical working. The chief objection which has been raised, is that it is unmanageable, and the quantity of mercury introduced into the system cannot be regulated, and that rapid and severe salivation might occur. For nearly twenty years I have administered, or superintended the administration of this bath, from four to six times every day, and I have never seen one case where such an effect has been produced.

The analogy has been made with the dry fume, which sometimes has produced such an effect: the mixture and dilution of the vapours of mercury with common steam, and the sweating induced by the bath, entirely removes any fear of this kind, and I would stake my reputation that with proper management it cannot occur.

I must not be understood to say that I consider or recommend the mercurial vapour bath as a specific remedy in all forms of constitutional syphilis, but I repeat that it is the most powerful therapeutic agent in the removal of disease, and the least harmful to the constitution of the patient of any remedy with which I am acquainted; neither am I so prejudiced in favour of this remedy as to reject the assistance of all others, which, as we shall presently see, when associated with it, under certain circumstances, produce the best effects, but which effects, I am bound to say, would not, under many circumstances, occur without the assistance of the vapour, since in numerous instances these remedies have failed in curing the disease when used alone. The profuse sweating induced by the bath, prevents the accumulation of either iodine or mercury in the system, and thus contributes materially to the preservation of the constitution of the patient.

THE CHLORIDE OF MERCURY.

Calomel may be administered internally, as an antisyphilitic, united to opium, or conicum and soap; it is, however, an uncertain and unsatisfactory remedy, and one which, under such circumstances, except as an aperient, I should never employ internally. Apart from its internal exhibition, however, it has various uses in the treatment of syphilis. Mixed with lime water in various proportions, it forms a wash or lotion, exceedingly useful in dressing many primary and secondary venereal ulcers. Formerly, mixed with honey, it was used by way of frictions on the tongue and gums, according to the methods of Clare and M. Brachet, of Lyons. The only way in which I use calomel, under ordinary circumstances, in the treatment of syphilis, is in ulcerations of the nasal fossæ, where, mixed with powdered acacia, a small quantity is blown into the nares two or three times a day. I have used this in the Queen's Hospital and in private practice frequently. After the failure of other means M. Biett has used it in this way, with complete and prompt success.

℞. Hyd. chloridi, gr. ij—v;
Pulv. acaciæ, gr. v.
M. ft. pulvis ter die utend.

M. Biett has carried the insufflation of calomel to the extent of fifteen or twenty grains a day. Some very remarkable and good cures were obtained in this way. All modes of administering calomel are, however, open to the objection of producing a troublesome salivation.

THE BICHLORIDE OF MERCURY.

The bichloride of mercury is a valuable remedy in the treatment of many forms of constitutional syphilis, particularly of those varieties which are complicated with ulcerations of the mucous surfaces. According to Dzondi, whose method of treating syphilis is extensively followed in Germany, and at the La Charité Hospital of Berlin, the bichloride of mercury is the chief preparation of this remedy on which reliance should be placed in the treatment of constitutional syphilis. This was a favourite remedy of Dupuytren's, who gave it in small doses in the form of pills.

℞. Hydr. bichloridi, gr. ij;
Pulv. opii, gr. viij;
Pulv. guaiaci, gr. xxxii.
M. ft. Pil. xvj; j ter die.

Dzondi's pills each contain one twentieth of a grain of the bichloride, united with a small quantity of opium. He administered, in the commencement, four a day, half an hour after the dinner meal. Twelve grains of the bichloride are made with an inert powder, as liquorice, into 238 pills. Four of these pills are given the first day; the day but one after, six; increasing the dose two pills every day, and leaving one day's interval between each dose, so that on the thirtieth day from the commencement, the patient takes thirty pills, or one grain and a half of the salt.

The bichloride of mercury is much better administered in solution; it is a favourite remedy with me. I exhibit it in solution, with some decoction of the woods, either of guaiacum, or sarsaparilla. From twenty drops to a drachm or more of the Liquor Hydrargyri Bichloridi may be given in a tumblerful of one of these decoctions, twice or thrice a day with the best effect. United with bark and hydrochloric acid, it is also exceedingly useful in the advanced stages of constitutional syphilis in debilitated habits.

Mixed with lime water, in the proportions of from four to eight grains to the half pint, it forms a useful application to many secondary venereal ulcers. I exclude from consideration the method of Cirillo, which consists in using the bichloride mixed with lard, by way of friction, on the soles of the feet.

THE IODIDE OF MERCURY.

The iodide and biniodide of mercury were first introduced into the therapeutics of syphilis by Biett of St. Louis, and since largely employed in that hospital by his successor, M. Cazenave. They are most valuable remedies in the treatment of many forms of constitutional syphilis, and I have for years employed them both, but more especially the biniodide, with almost uniform success. Many surgeons who have employed it associate it with opium, but Biett and Cazenave state that its combination with opium destroys its curative properties, although its efficacy is increased by treating the patient with daily doses of opium for a few days before the use of the iodide is commenced; it is useful also to omit the remedy for a day, every three, and give a full dose of opium. The iodide of mercury must be administered in the form of pill combined with lactucarium, in doses of from one to three grains.

℞. Hydr. iodidi, gr. x.;
Lactucarii, ℈ij. M. ft. pil. xx.

From one to four pills a day (Cazenave.) A very good way of administering the iodide has been suggested by Dr. Neligan, to substitute it for the calomel in Plummer's pill.

The iodide of mercury is indicated in pustular, and tubercular diseases of the skin, in diseases of the bones and testes; in secondary venereal ulcerations, where the constitution has long suffered protracted and varied treatments, and still the disease remains. It frequently cures after the failure of other remedies: its employ should be associated with a nourishing, but not stimulating diet, decoctions of the woods, and the mercurial vapour-bath.

THE BINIODIDE OF MERCURY.

I prefer the biniodide of mercury to the iodide: I find it agree well with the gastric constitution of the patient, which the iodide frequently does not. It is more manageable, and can be given in solution, a great advantage. I employ it always in solution with the iodide of potassium, a combination which I have been in the habit of prescribing in the Queen's Hospital for years.

℞. Hydr. biniodidi, gr. ij;
Potass. iodidi, ʒj—ʒij;
Sp. vini, ʒj;
Syrup. zinzib., ʒij;
Aquæ dest., ℥iss. M.

Twenty or thirty drops three times a day in half a tumbler of some decoction of the woods. M. Puch, of the Hôpital du Midi, employs a form somewhat similar. This remedy is indicated in the same cases as the iodide. Used in small doses with the mercurial vapour-bath, it produces excellent and permanent cures.

THE BICYANIDE OF MERCURY.

The bicyanide of mercury is frequently employed in secondary syphilis, and for the following reasons. It is soluble, and not liable to decomposition, acts quickly, and does not occasion those pains in the stomach and bowels that so frequently accompany the prolonged administration of some other preparations. According to the researches of M. Parent-du-Châtelet,[1] the bicyanide of mercury is not decomposed by either acids or alkalies, nor by decoctions containing azotized principles or gallic acid.

The bicyanide of mercury may be administered internally in

[1] Revue Médicale, Août, 1832.

pills, or in solution, and used externally in form of pomade or ointment. Externally it is an extremely useful application to various forms of herpes, particularly that form termed by Alibert, "herpes squamosus," the violent itching and irritation of which it allays. It may be employed externally also as a dressing to indolent syphilitic ulcers, and scirrhous tubercles, or as a gargle in ulcerations of the throat. The dose of the bicyanide is from $\frac{1}{16}$ of a grain to a grain.

GARGLE OF THE BICYANIDE OF MERCURY.

℞. Hydrargyri bicyanidi, gr. x;
Infus. lini comp. ℔j. M.

SOLUTION OF THE BICYANIDE OF MERCURY.

℞. Hydrargyri bicyanidi, gr. vj ad gr. x.
Aquæ, ℔j. M.

Half an ounce for a dose, administered in a mucilaginous vehicle or with the addition of sugar in form of syrup.

PILLS OF THE BICYANIDE OF MERCURY.

℞. Hydrargyri bicyanidi, gr. xxiv;
Ammoniæ muriatis, ʒiij;
Guaiaci gummi, ʒiij;
Ext. aconiti, ʒiij;
Ol. anisi, ♏ xxiv.
M. mucilaginis, q. s. ft. pil. 400.

One or two twice or three times a day, the dose gradually increased. Each pill contains about $\frac{1}{16}$ of a grain of the bicyanide. These pills are a substitute for the bichloride of mercury in many forms of secondary syphilis.

THE IODIDE OF POTASSIUM.

Iodine and its preparations, more particularly the iodide of potassium, are employed largely in the treatment of all forms of syphilis. Desruelles has recorded several cases of the cure of primary sores with the iodide. Hanek and Kluge have, on the contrary, given the results of four hundred cases of primary syphilis in which the iodide of potassium had little or no effect. M. Payan has related some cases of indurated chancre, and primary sores with bubo, which yielded to treatment by the iodide. My own experience is against the use of the iodide in primary syphilis, except in some cases of phagedena, in bad habits of body, where I have seen it useful. M. Payan lays it down as a principle, that

the efficacy of the iodide of potassium is in direct ratio with the long-standing of disease, and hence M. Ricord and others have been led to regard this remedy as almost specific in what M. Ricord terms tertiary symptoms, such as nodes, tubercles, affection of the testes, pains in the bones, caries, and certain forms of secondary ulcerations. M. Ricord regards the iodide of potassium as a prophylactic against tertiary symptoms when secondary symptoms have disappeared under the use of mercury.

It is certainly in the class of cases just alluded to that the iodide of potassium is most useful, and under many circumstances works remarkable cures. The iodide of potassium, as I have already said, is not to be depended on in the treatment of primary sores; neither is it generally indicated in the earlier stages of secondary eruptions in healthy subjects, nor in the confirmed or chronic stages of scaly or papular diseases of the skin. In such complaints, antimonials, or the bichloride or biniodide of mercury in small doses, in decoctions of the woods, are infinitely more certain and effectual.

In pustular and tubercular skin disease, or in the secondary forms of ulceration which succeed to these, more especially if mercury have failed in their treatment, or the patient be weak and debilitated, or over forty years of age, the iodide of potassium is a most valuable therapeutic agent.

There are, however, many cases of this nature in which the iodide rather suspends than cures disease; and its prolonged use disposes to wasting of the body, and under some circumstances utterly destroys the digestive powers. I have known cases where it has been taken respectively for three, five, nine, and ten years; and in these cases the symptoms have returned when the iodide has been discontinued. A case will be found in the next Chapter, of a surgeon who took three daily doses for ten years, and yet his disease remained. Whilst he took the iodide the symptoms were kept under, but when he omitted it they always returned. Pains in the bones are very apt to return directly the iodide is given up. Such cases are not singular; they are exceedingly frequent. Dr. Neligan says, "Iodine and its preparations should not be trusted to alone with the intention of producing a specific action in the treatment of the secondary eruptions; their combination with mercurials is of especial service, but, unless thus prescribed, they usually disappoint. In scrofulous habits their administration should never be omitted, but still a mercurial must be given with them.

The administration of the iodide of potassium is attended with the best results, as soon as the preparation of mercury which has been given, evidences its action on the system by the mouth being affected."[1]

The iodide of potassium cannot be taken by some patients; in many it produces swelling of the tongue, and salivation; in others, puffing and swelling of the face, and a stiffness of the muscles of mastication. I do not think it produces wasting of the glandular organs, such as the testes and mammæ. I have elsewhere ("Provincial Medical and Surgical Journal,") recorded several cases of the prolonged use of the iodide where the testes, &c., were unaffected.

The iodide of potassium may be administered in doses of three to twenty grains three times a day, in distilled water, or some sudorific decoction, as sarsaparilla, saponaria, &c. By some surgeons its use has been carried much farther, and several cases have been recorded where the iodide of potassium has succeeded in large doses where it has failed in smaller ones. M. Vidal mentions a case of ulceration of the tongue, where the iodide had been taken for six months to the extent of twelve grains a day without benefit, which healed in thirty days where the patient took for the first few days thirty-six grains a day, and afterwards seventy-two grains a day. In small doses the iodide is tonic, and as such may be employed as a prophylactic of a further outbreak; when given after a mercurial course which has been employed for the cure of secondary symptoms, and which have disappeared under such treatment. The iodide should then be given in small doses, five or eight grains three times a day, in some sudorific decoction, for some time.

When, again, secondary symptoms do not yield to mercury or only partially yield, or where the remedy appears to benefit for a time, and then loses its effect, its use should be given up, and the iodine taken for some weeks in small doses; the mercurial course should then be resumed, with another form of mercurial remedy, and it will be commonly found that the symptoms very quickly yield.

It is in large doses, rarely less than from ten grains to a scruple, that the iodide of potassium acts as a direct anti-syphilitic.

[1] On Diseases of the Skin, p. 398.

IODIDE OF SODIUM.

The iodide of sodium has lately been recommended as a substitute for the iodide of potassium, by Dr. Gamberini, of the Hospital of Saint Orsola, Bologna.[1] The following are the conclusions made by Dr. Gamberini:

1. The taste of the iodide of sodium is much less disagreeable than the iodide of potassium.
2. It is much less likely to occasion iodism.
3. It is better borne than the iodide of potassium, and in consequence of this its dose can be almost daily increased, and it thus becomes a more efficient remedy.
4. It has succeeded where the iodide of potassium has failed.
5. We may commence with doses of a scruple a day; two drachms a day have been taken without the slightest inconvenience.
6. The iodide of sodium is admirably suited to cases in which the corresponding salt of potassium is indicated.
7. The iodide of potassium is the best substitute for mercury.[2]

IODIDE OF IRON.

The iodide of iron may be employed with or without the iodide of potassium, in many of the advanced stages of constitutional syphilis. The cases best suited to its exhibition are those of syphilitic cachexia, or chlorosis, complicated with old ulcers, or diseases of the bones, in a strumous habit of body. It is advantageously prescribed in one of the decoctions of the woods, hereafter spoken of.

[1] See Dublin Quarterly Journal, No. 28, Nov., 1852.

[2] I have used the iodide of sodium largely in the Queen's Hospital, prepared by an eminent and experienced manufacturing chemist of this town, Mr. Philip Harris. It has been successful in those cases where the iodide of potassium might also have been beneficial, such as nocturnal pains, diseases of the bones, and the ulcerating forms of tubercle. In one case of syphilitic tubercle of the tongue, its effects were very speedy and marked. It may advantageously replace the iodide of potassium in many cases where the latter cannot be borne, as it does not produce swelling of the tongue, discharge from the nose or eyes, pains in the muscles of the face, or any pustular eruption, so common under the use of the iodide of potassium. It is well known that some patients cannot take the iodide of potassium where it is strongly indicated, and here the iodide of sodium will prove useful: it is also exceedingly probable that it may cure where the iodide of potassium has failed. On the whole, my experience in the use of this salt has been such, as to warrant my recommending it as a very valuable addition to the remedies at present employed in the treatment of constitutional syphilis, and it is exceedingly probable that many cases will occur, where it may find its special application.

I have employed the iodide of sodium, as an anti-syphilitic, in doses of fifteen grains three times a day,

SUDORIFICS, VEGETABLE DECOCTIONS, AND INFUSIONS.

The various vegetable decoctions and infusions have been long, and are still, employed in the treatment of secondary and constitutional syphilis. To some of these a specific action has been attributed, whereas others must be looked upon as auxiliary remedies merely, whose action is comparatively feeble. Of themselves, it may I think be said, that they never cure alone; occasionally some symptoms disappear under their use, but generally return when this remedy is omitted. In many forms of skin disease these decoctions of the woods are useful; as auxiliaries, they certainly assist the action of other remedies, and I always prescribe them with this view, during the time a patient is using the mercurial vapour-bath.

The remedies which are chiefly useful in this way, are sarsaparilla, guaiacum, burdock, water-dock, saponaria, sassafras, dulcamara, mezereon, and elm-bark. I generally recommend the compound decoction of sarsaparilla, made according to the form of the London Pharmacopœia, or what I think better, the compound decoction of guaiacum of the Dublin and Edinburgh Colleges, to be taken with the bichloride or biniodide of mercury, or the iodide of potassium. The saponaria is a favourite remedy with many Continental surgeons, who seem to place much faith in it as an auxiliary remedy. Mr. Whitehead speaks highly of the Rumex hydrolapathum (Water-dock) in the secondary, or rather the tertiary forms of syphilis. Mr. Whitehead says its virtues as an anti-syphilitic cannot be too highly extolled. The only part recommended for use is the root. Most of these remedies may be employed in form of decoction, in the proportions of about an ounce to a pint. All these decoctions should be prepared fresh every two or three days.

In Germany especially, an empirical treatment by the decoction of Zittman is said to be very frequently successful; it is associated with aperients, rest in bed, and a most rigid diet. It is, as Mr. E. Wilson truly says, a compound of sweating, starving, and purging. I have seen several German patients, who have been treated by this plan, and their diseases not cured. It reduces the patients to an extreme degree of weakness, and requires confinement to bed during the course.

ZITTMAN'S DECOCTION.

℞. Rad. sarsaparillæ, ℥xij;
Aquæ, ℔ xxiv.
Boil for two hours, and add—

Aluminis sulph., ℥iss;
Hydrarg. chlorid., ℥ss;
Antimonii sulphuret., ℥j.
Boil down to two thirds, and add—
Fol. sennæ, ℥iij;
Rad. glycirrhizæ, ℥iss;
Sem. anisi, ℥ss.
Infuse for an hour, and strain.

This is termed the stronger decoction. The weaker one is to be prepared by taking the residue which remains after straining the stronger, and adding

℞. Rad. sarsaparillæ, ℥ij;
Aquæ fontanæ, ℔ xxiv.
Boil for two hours, and add—
Corticis canellæ,
Corticis limonum, } āā ʒiij.
Semin. cardamomi,
Infuse for an hour, and strain.

The patient is directed to take half a pint of the stronger decoction the first thing in the morning, warm, and to remain in bed some time after taking it. During the day, he should take at intervals a pint of the weaker decoction, and in the evening a second half pint of the stronger. The last two doses are to be taken cold. Every fifth day the decoctions are to be omitted, and an aperient taken.

In some anomalous forms of scaly venereal diseases of the skin, arsenic has been recommended: alone, it is rarely if ever successful in pure syphilis: with the iodide of potass, or mercury, it is sometimes useful. In Donovan's solution, the arsenic is combined with both remedies.[1] I have found this remedy uncertain, sometimes inert, at others too active.

OPIUM.

Opium has, by a number of authorities, both ancient and modern, been extolled as a remedy of great value in the treatment of many forms of syphilis, and by many surgeons the dose has been carried to the extent of twenty or even thirty grains in the day. The cases in which opium is indicated, and in which I have employed it with success, are those of constitutional syphilis where the health has been broken by protracted disease and the use of

[1] Liquor Arsenici et Hydrargyri hydriodatis, Ph. D.

mercury; when the nights are bad, and the patient emaciated and feeble; where a general irritability, the result of disease and mercury, prevails, and appears to be wearing the patient out.

In exostoses, periostoses, local pains, and secondary ulcerations, occurring in constitutions and in persons thus circumstanced, opium in large doses sometimes acts magically. I have employed it also with marked success in secondary ulcerations of the throat which have remained after mercury had been a long time used, and the ulcers still remained rebellious to every plan of treatment. In protracted ptyalism, resisting local treatment, it is also very efficacious. In all these instances opium appears to subdue a certain constitutional irritability which keeps up the disease and upon which the disease appears to depend more than upon any specific cause. It is surprising what large doses of the drug patients in this state will sometimes bear without producing constipation or headache. I have rarely given more than four or five grains a day, but I have no doubt the dose, as recorded experience has already proved, might be carried much further without any risk, should the circumstances of the case require it. In summing up the history of the remedies employed in constitutional syphilis, Cazenave says, "We have yet another mode of treatment to recommend, by whose agency we have seen the most formidable symptoms yield, the most inveterate ulcerations healed, and the most durable cures produced, when all other remedies have failed. We speak of the aqueous extract of opium, a precious remedy, even in the most profound cachexia."[1]

[1] Traité des Syphilides, &c.; Paris, 1843.

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CHAPTER XXXIII.

CLINICAL OBSERVATIONS ON THE TREATMENT OF SECONDARY CONSTITUTIONAL AND CONFIRMED SYPHILIS, BY THE MERCURIAL VAPOUR-BATH, AND OTHER REMEDIES.

CASE XXIX.

Various forms of constitutional syphilis for five years; failure of various remedies; rapid cure by mercurial vapour.

A PHYSICIAN contracted, in the year 1845, a sore at the orifice of the urethra, which was followed by two buboes, which did not suppurate freely: the patient's health was very much impaired by this disease, and his constitution had been previously debilitated by hard work, and an attack of typhus fever. In August, 1849, he had ulceration of the throat; in three weeks the palate was destroyed to a considerable extent. After the ulceration had healed an artificial palate was applied: shortly after this the ulceration again appeared, and has not again healed. In November, 1850, this gentleman placed himself under my care, and at that period he was in the following state:

A sloughy, foul, phagedenic ulcer occupied the left tonsil, the whole of the pharynx, and the back part of the roof of the mouth. In addition, there was a general faint copper-coloured mottling of the skin generally, a large scaly blotch on the chest, and a large pustulo-cutaneous spot on the back; on the legs the cicatrices of what appeared to have been secondary ulcers, succeeding to pustules or tubercles. The health was much impaired, the weakness great, nights bad, severe pain in the throat, and a fetid discharge from the nose.

The patient used the mercurial vapour-bath every other day; was directed to take the cold infusion of sarsaparilla with lime water, with half a grain of the hydrochlorate of morphiæ at bed-time, and to wash out the throat frequently with a weak creasote gargle. The diet to consist of wine and water, fresh animal food, cocoa, and milk.

The seventh bath was administered on November 20th. The copper-coloured mottling of the skin was all gone, the pustulo-crustaceous spot on the back shrivelled up into a hard crust, without an ulcer underneath. All the ulcers in the throat and pharynx rapidly healing, the general health, appetite, and strength much improved, nights good, gums sore, no salivation. This gentleman could never take mercury internally under any form; when persevered in for a few days in this manner, it always produced distressing tenesmus, and great bodily and mental depression.

Up to December 2d, the baths were administered every third day: on that date all the ulceration had healed; a very small granulating healthy sac only remained in the centre of the site of the old disease. Gums sore, appetite good, no salivation. All the skin disease had disappeared. This patient was under my treatment three weeks, during which time he took fourteen baths. He pursued the treatment after he left me for some time; but the cure appeared perfect.

On writing to me a few weeks afterwards, he says, "My medical friends are quite astonished at the rapid progress I have made under the use of the vapour, both in regard to my throat and my general health."

CASE XXX.

Constitutional syphilis under various forms for three years; failure of various remedies, especially the iodide of potassium; cure by the mercurial vapour-bath.

A young gentleman, apparently healthy, contracted a primary sore in 1849, which was four months healing, and left behind it an induration which lasted two months longer. The throat was attacked with secondary syphilitic ulceration before the chancre had healed. In 1850, he had an attack of skin disease, which was succeeded by nocturnal pains in the head and legs: these pains, being partially benefited by medicine, recurred with so much violence in January, 1851, that he was confined to bed till March. The pains were always mitigated, and sometimes removed for a short period, by the iodide of potassium; but when this remedy was laid aside they invariably returned, a circumstance which very frequently attends the treatment of syphilis by the iodide, which the history of the next case illustrates in a very marked degree.

In August, 1851, this patient placed himself under my care. I did not see him in any of the previous attacks which I have mentioned. He had, at the present date, constant severe pains of the arms, legs,

and bones, which were worse on damp days, and when in bed. There were also pustulo-crustaceous spots on the head, and a dry red throat. All the symptoms disappeared under one month's treatment by the vapour, and the use of the decoction of guaiacum. In twelve months afterwards no pain was felt. Early in 1852, there was a very slight return, which was removed by the treatment first adopted, which was again followed for a very short time: since that period there has been no fresh symptom, and the patient has appeared perfectly well.

Case XXXI.

Constitutional syphilis for twenty-four years; repeated salivation; prolonged use of the iodide of potassium; failure of these remedies; great relief and cure of many of the symptoms by the mercurial vapour-bath, &c.

A surgeon, æt. 47, consulted me in May, 1850, for various symptoms of constitutional syphilis, from which he had suffered for twenty-four years. He had, at the time when he consulted me, syphilitic sarcocele of the right testis, complicated with a small hydrocele; a well-marked syphilitic psoriasis of the hands, which were like a fish's skin, so thick and hard were many of the scales: at times the hands became painful and inflamed: he had also general thickening, with enlargement of the tongue, which was covered with hard lumps, between which were deep fissures, extending nearly through the whole substance of the tongue.

This patient had taken ten grains of iodide of potass three times a day for ten years: his appetite was bad, and he looked dry and shrivelled. When the iodide was omitted, the hands always became painful and inflamed, but no farther progress towards a cure was made by the use of this remedy: when discontinued for a few days, all the symptoms returned as badly as ever.

I recommended the use of the mercurial vapour-bath three times a week, ten grains of the extract of conium at bed-time, with the cold infusion of sarsaparilla in lime water. I must confess I felt very uncertain about the issue of this case. In November, *i. e.* about six months after I had first seen this gentleman, he called again on me: I did not know him: he had regained his flesh and appetite, and the hands were well; the tongue most materially improved, and the sarcocele much reduced. He was under an engagement to marry; and stated that his health had never been so good as now, since the first outbreak of disease, twenty-four years ago.

CASE XXXII.

Pustular syphilitic disease of the skin (ecthyma,) with other symptoms of constitutional syphilis for two years; various treatments without effect; rapid disappearance of the symptoms by the use of the mercurial vapour-bath.

A gentleman, æt. 34, of delicate health, was sent to me, on June 24, 1850, labouring under a most formidable attack of secondary syphilis. He had had primary sores two years before, and various forms of eruption on the skin, from that time to the present. This patient's disease was what I have described as "pustulo-crustaceous." There were large distinct pustules on the face, head, body, and limbs, to the number of about thirty-five. In two places, the pustules were smaller and placed in groups: this happened on the forehead, and on the chest. The pustules soon became covered with dark-coloured, laminated, or conical crusts, closely adherent to the parts underneath, and surrounded for a short distance by a deep red, or livid margin. The crusts when detached, were found to have covered ulcers more or less deep, which, if healed when the crust fell off, left behind it a deep and vividly red cicatrix slightly depressed: if the crust were detached before the ulcers they covered were healed, the ulcers were superficial, but foul, unhealthy, and disposed to spread: the crusts situated over bones, or on the forehead, ulna, and ribs, when detached, always left a deeper depression than on the skin, and the surface of the bone over which they were placed was always absorbed to a slight extent. In addition to this formidable local mischief, the patient was weak, emaciated, had night sweats and diarrhœa.

The mercurial vapour-bath was used for a few minutes each day, opiates were administered at night, and the cold infusion of sarsaparilla in lime water was given. The diet was good, wine and ale being freely given.

On July 5th, a great part of the crusts had fallen, and had left the skin sound underneath: many of the sores looked healthy, others not so; the general health much better; appetite good; bowels were settled; strength daily improving; patient bears the baths for a longer period with comfort; mouth sore; no salivation.

In six weeks, the time I personally treated this patient, twenty baths were taken; and at the end of this period all the crusts had fallen, and all the sores had healed; the bowels were regular, and the health and appetite good. The red colour of the cicatrices remained for some weeks, gradually dying away: this is always

a work of time. The patient has continued in good health since; and there has been no recurrence of any fresh syphilitic symptom.

Case XXXIII.

Constitutional syphilis for seven years; failure of various remedies, amongst others, the iodide of potassium, and mercury pushed to salivation; complete cure by the mercurial vapour-bath, and very small doses of the biniodide of mercury.

A married lady, æt. 30, was brought to me by her husband, from Paris, to be treated by the mercurial vapour-bath. She had suffered from constitutional syphilis for seven years, but had never had any primary affection; neither on careful and minute examination could I detect any disease of the sexual organs themselves. Her disease consisted in dusky red patches spread over the whole body, covered with a dry dandriff or scurf, not to be called a scale: in places the disease assumed the form of irregular patches, in others circles or rings; they were uniformly spread over the back, arms, chest, &c. On the knee was a ring of rupial crusts, resting on an inflamed base. The patient had suffered from ulcers of the throat, and had entirely lost her hair.

For seven years this disease had remained uninfluenced by remedies. A leading surgical authority did me the honour to recommend my plan of treatment to be tried in this case, as mercury under the usual forms, iodides, decoctions of the woods, &c. had all failed.

The treatment by the mercurial vapour-bath was commenced on the 16th of July, 1851. The baths were used three times a week, sometimes more frequently, and one twelfth of the biniodide of mercury was given in solution three times a day in water. On the 12th of August the skin was clear, all the coppery red stains, in circles and patches, had disappeared; the skin clean and soft; the rupial ring on the knee, or rather the dark stain it had left, was fast disappearing. At this period, the patient left me. The baths were resumed again, after the lapse of a week, for a month; since which period the cure has appeared perfect, the health has been good, and no other symptom of syphilis has appeared. The gums were sore and spongy from the baths, but no salivation was produced.

CASE XXXIV.

Constitutional syphilis, with bad health for seven years; failure of iodine, and mercurial treatments, as commonly conducted; disappearance of all the symptoms after a treatment by the mercurial vapour-bath, with the biniodide of mercury, and the iodide of potassium.

A barrister, æt. 30, placed himself under my care in August, 1850. He had suffered from constitutional syphilis for seven years, for which he had undergone a variety of treatment, under the combined influence of which, and his disease, his health had become completely broken. When he first visited me, he suffered from the following syphilitic symptoms: the face, arms, and body, were covered with large pustulo-crustaceous patches; these patches consisted of a red base, upon which was placed dark flat crusts; some of these crusts were large, others small; they did not cover ulcers. In other places there were large lividly red blotches elevated above the skin: after a time these suppurated slightly in the centre, and became covered with a thick, black, flat crust. On the cheek, just below the orbit, on the left side, was a large solid tumour, lividly red on its surface, but presenting no fluctuation (syphilitic tubercle.) Under and around each blotch, the skin was thickened and indurated; this thickening evidently implicating the whole thickness of the skin. Both legs were painful, and the shin bones were uneven and tender to the touch. The patient was weak, tormented with night perspirations and pains, the digestion bad, and the bowels disposed to relaxation.

The treatment was commenced on August 20th, and consisted of the following plan: The mercurial vapour-bath four times a week, with the twelfth of a grain of the biniodide of mercury in solution, with three grains of the iodide of potassium twice a day: at night, the patient took ten grains of the extract of conium, and drank half a pint of the warm decoction of guaiacum; the diet to be good, but not stimulating. This gentleman was treated personally by me for eighteen days: he took fifteen baths: at the end of that time the skin was soft and healthy, with the exception of some slight red stains, where the ulcers and tubercles had been situated. All the induration and thickening were gone. The pains in the limbs, and the night perspirations had also left. The gums were puffy, swollen and sore; no salivation.

He was directed to continue the use of the vapour three times a week, and to drink the cold infusion of sarsaparilla in lime water.

Writing to me in October, this patient says: "I have already commenced the beginning of the end of the treatment: I am wonderfully improved in my general health, and every appearance of disease has entirely disappeared. I am enjoying an elasticity of body and mind I have been a stranger to for many years. I shall think it my duty to humanity to become the propagandist of your system of treatment."

Case XXXV.

Constitutional syphilis for two years; failure of various remedies; cure by the mercurial vapour, without any other remedy.

A gentleman, æt. 23, placed himself under my care in January, 1849, suffering from the following symptoms: sarcocele of the right testis; severe nocturnal pains in the head, arms, and legs, their severity preventing rest at night altogether; a general copper-coloured mottling of the face, chest, and abdomen; three well-marked large syphilitic tubercles on the cheek: he had suffered from various forms of secondary syphilis for two years, had taken so much medicine that he declared it was impossible for him to take any more, let the consequence be what it might.

I placed him on a milk diet, and commenced the use of the mercurial vapour, on January 17th; the head was placed in the bath: on February 4th every symptom had disappeared. On June 1st, a few scaly spots reappeared on the hands: four baths were taken, the symptoms disappeared: the patient, whom I frequently see, has enjoyed the best health since that period. No medicines were taken.

Case XXXVI.

Ulceration and pains in the throat; thick scaly blotches, with burning and heat of the hands and feet; cure by the mercurial vapour.

A gentleman aged 24, had suffered from many forms of secondary syphilis for eighteen months, many of which had disappeared under treatment; but there remained an ulceration of the throat, accompanied by occasional severe pains in that part; but the chief symptoms of annoyance were the hands, each of which was covered for three parts of its surface with a thick scaly red patch, occupying the whole of each palm, and part of the thumb and fingers. The hands were always hot, and a painful burning sensation was seated in the extremities of the fingers: the feet were also hot and hard, but had no scale or patch upon them. Medicines of many kinds had utterly failed in relieving these symptoms.

The vapour treatment was commenced on June 30th, and on August the 22d the hands appeared healthy, all the scales were gone, the skin soft, pliable, and healthy. Some heat remained at times, and occasionally the parts were red and mottled: the hands were smeared with a little zinc ointment, and the patient slept with them in compresses soaked in a lotion composed of camphor mixture, spirits of wine, and glycerine. In three months this cure was perfect.

CASE XXXVII.

Superficial primary sores; inability to take mercury; healing of the sores under ordinary treatment; secondary disease in the skin, throat, and nose; cure of all the symptoms by the mercurial vapour-bath.

A gentleman consulted me respecting certain symptoms, which he considered, and which doubtless were, due to constitutional syphilis. He had primary ulcers eight months previously, for which he could not take mercury; the smallest quantity produced diarrhœa, and it even affected him so, when used by friction. The ulcers had healed under a simple treatment, but soon afterwards, the skin became covered with small scaly blotches: there was a deep redness of the throat and nasal fossæ, and the hair and eyebrows came off rapidly. He had taken iodine and sarsaparilla, under various forms, without success: occasionally there was a partial amendment, but he constantly relapsed when medicine was discontinued.

The baths were used twelve times, the gums rendered uneasy and swollen, but nothing more; not a bad symptom accompanied the treatment, and the patient has had no fresh symptom for fifteen months. He took no internal medicines whilst under my care. The third bath checked the falling off of the hair and eyebrows, which began rapidly to reappear before the termination of the treatment.

CASE XXXVIII.

Phagedena of the throat immediately arrested by the use of the mercurial vapour-bath.

A lady, aged 34, had a superficial ulceration of the throat, her husband at the same time suffering from the same disease. She had also large pustular scabs on the legs, and her health was bad. She took the bichloride of mercury with sarsaparilla, for some time, and apparently recovered. For six years she remained apparently well. In May, 1846, she began to suffer from cough, and

emaciated a good deal, yet there was no physical sign of disease of the lungs. At this period she complained of sore throat, and on inspection the soft palate had a swollen, thickened appearance. In this state she went into Wales, from whence she returned in a fortnight, her throat having got rapidly worse. There was now a small hole in the soft palate, with a white margin, and the whole of the throat was intensely red: there was also an ill-conditioned ulcer, with a white slough, in the left nostril, which threatened speedily to perforate the cartilage of the nose.

The danger was imminent, and the state of the parts such as to lead me to fear a very serious and extensive mutilation, as the ulcers in the throat and nose had only been present two days, and already the soft palate was eaten through in one place, and two other small ulcers threatened to perforate it in others.

What was to be done in such a case? There was no ordinary mode of treatment that could have been brought to bear upon such a state of things in less than three or four days, and by that time the mutilations would have been fearful, as disease was spreading with great rapidity.

I determined to submit my patient at once to the action of the mercurial vapour-bath, in which she was placed, with the head immersed, for half an hour: this was repeated on the next and succeeding days, when the gums became tender and swollen. The first bath arrested the whole of the ulcerative process: on the third day the sloughs had fallen, and the ulcers looked healthy. Six more baths, at longer intervals, completed the cure, there not remaining, at the end of eighteen days, any apparent disease, except the perforation in the soft palate, which was small, and occasioned but little inconvenience.

I directed this lady, who was of a weak habit of body, to take afterwards for some time the iodide of iron, with a decoction of sarsaparilla. She has had no new symptom. The cure has been permanent hitherto.

Case XXXIX.

Discharge from the urethra as a primary symptom; scaly blotches on the skin and a node on the forehead, as constitutional symptoms; perfect cure by the mercurial vapour-bath.

A gentleman consulted me respecting a lump on his forehead, which was red, tender and painful: he had upon different parts of the body, and on the head more particularly, some dry, scaly

blotches: his hair also came off rapidly. He had no primary venereal disease, except a discharge from the urethra, concerning the nature of which there had been some difference of opinion. It clearly had not been gonorrhœa, and had resisted the usual remedies employed in that disease. The discharge no longer existed when I first saw the patient, and I could not find in the urethra, on examination, any trace of the previous existence of an ulcer.

I recommended the use of the baths, which were given every other day. I prescribed no internal medicines. At the end of three weeks all the symptoms had disappeared, and the hair was coming on rapidly.

About a year afterwards this gentleman called on me, when passing through Birmingham, and told me he had not had any return of complaint.

Loss of the hair is one of the commonest symptoms of constitutional syphilis, and one which generally follows superficial sores: its nature is frequently deceptive, since, if it occur at that period when the hair is lost from natural causes, it is very apt to be overlooked altogether. I have seen several instances of this. On carefully examining a patient, where this appears the only symptom, we shall commonly find others to strengthen our diagnosis, if the loss of hair arise from venereal taint. One of the most common is an inordinately red condition of the mucous membrane of the nostrils, with or without any increased or altered condition of the secretions from these parts.

I consider the baths in such cases all but specific. I have never seen them fail. In almost all instances one or two baths has arrested the fall of the hair, and before half a dozen have been taken the hair almost invariably begins to grow and thicken. I have seen the eyebrows and whiskers, lost under these circumstances, quickly restored by the use of the baths.

Where it is important to produce a marked and immediate impression on the system, &c., to arrest the progress of rapid ulceration, as in the various forms of phagedena, this plan of treatment cannot be estimated too highly. I have seen phagedena in the nose, throat, and on the penis, stopped at once by immersion in the baths for half or three parts of an hour. No other remedy can be brought to bear thus speedily upon diseases of this nature, and the mutilations and losses of substance which occur in such states take place whilst we are waiting for the action of remedies.

Case XL.

Phagedena of the urethra and glans penis arrested immediately by the baths.

A gentleman contracted, from a suspicious connexion, a discharge from his urethra, which in the commencement was supposed to be gonorrhœa, and for which he was treated. The discharge did not yield to the remedies employed, and about ten days afterwards there appeared round the orifice of the urethra a white ring of ulceration, which spread rapidly. His surgeon became alarmed, and sent him to Birmingham, to be placed under my care. When I first saw this case there was an ulcer the size of a shilling surrounding the meatus, covered with a white slough, and the whole of the glans penis was intensely red, swollen, and shining. On separating the lips of the urethra the ulcer was seen to extend some distance down the passage.

I placed this patient immediately in the bath, and kept him there nearly an hour: he was directed afterwards to take a full dose of opium, to apply some decoction of poppies to the part, and to confine himself strictly to bed. On the next day the bath was repeated, and the same practice followed. On the third day the bath was again taken, by which time the sloughs were separating, and a healthy granular surface appeared underneath.

There had been no extension of ulceration since the first bath. Nine baths completed this patient's cure in less than three weeks, and the medicines employed, as well as the local applications, were of the simplest character. The mutilation was very trivial. The under surface of the urethra and glans penis was destroyed to a small extent, but from this the patient suffered very little inconvenience.

This was a case of phagedenic ulceration, commencing, as it frequently does, in or at the orifice of the urethra, with the nature of which I was unhappily too familiar, having seen frightful mutilation from sores of this nature under ordinary plans of treatment.

The first case of secondary phagedena of the throat, in which I had employed the mercurial vapour-bath, had been so successful, that I felt confident of success here, and the result justified my expectations. I reflected that rules of practice in cases of phagedena were quite unsettled, mercury being frequently employed as a last resource after the failure of other remedies. It is during this period, of bringing remedies to bear upon the disease, and the uncertainty of what to use, that the mutilations so commonly witnessed

in such diseases occur. The remedies which I advocate are without risk, and may be employed from the very first appearance of phagedena, with every hope of success even in the worst cases.

Case XLI.

Chronic enlargement of the testis; the primary affection consisting in enlargement of the glands in the groin, with superficial ulceration of the glans penis and prepuce; successful treatment by the mercurial vapour-bath.

A gentleman, æt. 26, contracted from a suspicious connexion superficial sores which were situated on the glans and prepuce; he had succeeding to these, enlargement of the glands in the left groin, which were painful and tender, but after a time subsided without suppuration. Some time afterwards this gentleman married, and soon afterwards the right testis began to feel heavy and uneasy, and gradually increased in size.

When I was first consulted on this case, the testis was as large as a turkey's egg, hard, but not painful or tender. I considered it of venereal origin; the patient was not of strumous habit or family, and, on examining him carefully, I found that his hair came off, and that the mucous membrane of the nostrils was intensely red, and there were one or two spots of superficial ulceration.

I recommended this patient to use the baths every other day. After the fifth bath the gums were a little uneasy, and, generally red and elevated. The patient took five more baths at longer intervals. The cure was complete in six weeks, the patient pursuing his customary avocations during the whole time of treatment.

There can be no question as to the venereal origin of this disease of the testis. The history and concomitant constitutional symptoms place the matter beyond doubt. I consider the condition of the mucous membrane of the nostrils one of the best tests of the nature of many constitutional forms of disease, about the true character of which there might otherwise be some degree of uncertainty. If this disease of the testis had occurred without any other symptom, there might have been a doubt as to its true nature; but, coexisting with loss of the hair in a young man, and with an inflamed and ulcerated condition of the nostrils, we cannot hesitate to pronounce it syphilitic.

The ordinary treatment of such a disease would have been either a long uncertain treatment by iodine, or a more certain mercurial course, which must have confined the patient to the house, and most likely to his bed, for an uncertain period. The baths were

perfectly successful in a short time, without one hour's confinement, or hinderance from business, and with benefit rather than injury to the general health, a risk that must be always run under the ordinary forms of mercurial treatment, and yet the patient is not safe, and can rarely be cured without it.

Case XLII.

Regular primary sore, with induration; succeeded by pustular disease of the skin and impaired general health; rapid cure by the mercurial vapour-bath.

A young gentleman contracted a chancre, the knowledge of which, from certain family reasons and fears, he, for some time, kept to himself. Several weeks afterwards I first saw him, and he had then undergone no treatment. There was a considerable induration between the glans and prepuce, on the summit of which was the primary sore not yet healed. The skin was covered with a well-marked pustular eruption. The pustules were in various stages, some recent, others broken and covered with eschars, and others again had degenerated into open sores. He was pale and emaciated, and his general health much impaired by his disease, which had now existed fourteen or fifteen weeks. His state of health was such as entirely to preclude a mercurial course, either by the mouth or by friction.

I recommended the use of the baths, and directed him to take half a grain of the extract of opium, three times a day, and some warm decoction of sarsaparilla night and morning. The open ulcers were dressed with a weak black-wash, covered with oiled silk, and bandaged. This patient took fourteen baths. At the end of a month he was well, had recovered his health and strength, and his disease was cured. He has had no fresh venereal symptoms for some years.

In this case there was both a primary and secondary disease to combat; a primary indurated venereal sore yet open, when the constitutional or secondary symptoms appeared, and these occurring in a constitution originally delicate, and still more impaired by syphilis. It is, in such a class of cases, exceedingly common, that the application of the moist mercurial vapour is invaluable, perfectly harmless in its application, and all but positively certain in its effects.

CASE XLIII.

Pustular disease of the skin; ulcers of the throat; severe nocturnal pains in the hips, legs, and head; impaired general health; rapid cure by the mercurial vapour-bath.

A young man, æt. 24, was sent to me, suffering from a formidable skin disease of venereal origin. He had had twelve months previously what appeared to be a regular primary sore, for which he had taken mercury to salivation. Under this treatment the ulcer closed; but before it was quite well he became covered with a well-marked eruption of venereal pustules. The disease had run the regular course of all pustular venereal eruptions. The pustules were, in some places, recent, in others covered with dark brown crusts; the crusts had fallen off in other situations, and left foul, dirty, irregular sores underneath; in one or two places the ulcers had healed, and left deep, red depressions in the skin. In addition to the skin disease there was an ulcer on each tonsil. This patient was pallid, weak, and emaciated, and so crippled with pains in the hips and shin-bones that he could not walk without a crutch and a stick, and got up stairs with the greatest pain and difficulty. He had undergone a variety of treatment without success.

This patient was directed to take the baths every other day. I prescribed for him small doses of opium and camphor, and the decoction of guaiacum to be drank warm morning and evening.

The ulcers were dressed as in the last case. After the third bath this patient walked up stairs without assistance, and his pains were all but gone. In less than six weeks he was quite cured, he had gained flesh considerably, and his appetite and health were good. He had not been confined an hour by his treatment, and he has never relapsed, a circumstance so common after ordinary mercurial treatments. He had tried the common vapour-bath when away from me with very little benefit.

The mercurial vapour-bath is very efficacious, if not specific, in removing those pains, compounded of syphilis and mercury, which have been produced by or succeeded to internal mercurial courses, prescribed for the cure of either primary or constitutional syphilis. The detail of the last case illustrates this position. I can bring forward another in support of it.

Case XLIV.

Severe pains in the limbs, succeeding to a primary and secondary venereal disease, treated by large quantities of mercury internally; radical and quick cure by the baths.

A young gentleman contracted syphilis in a seaport abroad, and was treated by large quantities of mercury by the surgeon of his vessel.

His primary disease was cured, but a pustular eruption subsequently made its appearance, and the glands of the groin on both sides became enlarged and tender. Before he returned to England the skin disease had nearly disappeared, but there remained copper-coloured depressions in the skin, marking the situations where the pustules had been, and these places were at times much inflamed and threatened to ulcerate again. The worst symptoms under which this patient laboured, were pains in the limbs, groins and different parts of the body, due either to exposure during his mercurial course, or to a combination of the remedy and disease yet remaining in the system. The pains harassed him severely, and the apprehension of a further outbreak of disease rendered his life wretched.

I directed the baths to be used every other day, gave him small doses of opium, and recommended him to drink some warm decoction of guaiacum night and morning. He got rapidly well; in a few weeks the depressions were no longer discoloured, the pains had left him, and the glands in the groin were reduced in size. This patient was radically cured; he has never relapsed.

It sometimes happens, I may say frequently, that patients who had passed through the whole ordinary routine of treatment for the cure of syphilis, and have been subjected to mercurial courses in different ways, three or four times, apply for relief for symptoms that still remain uncured, or which have appeared after they had believed themselves perfectly safe. These symptoms are very commonly confined to the epidermis and its appendages, and make their appearance in the form of dry scales on the palms of the hands, from which the epidermis ultimately peels off; sometimes the nails crack and break, or dry shining scales appear about the matrix of the nails themselves. Sometimes there are dry white patches on different parts of the skin, and with these appearances there is commonly a dryness of the throat and nostrils, and the hair and whiskers almost invariably get thin. There are some-

times, co-existing with these symptoms, pains of various kinds both in the bones and soft parts. In such states after almost all varieties of internal remedies have been used, and yet disease remains, the baths become of the greatest utility, and rarely fail at working a speedy and permanent cure. I bring forward one or two cases in illustration.

Case XLV.

Regular primary sore; treatment by frictions; skin and throat disease as secondary affections; subsequently peeling of the epidermis from the palms of the hands.

A gentleman contracted what appeared to have been a regular primary venereal ulcer, for which he took mercury by the mouth, and also used it by friction. He was salivated by this treatment. The ulcer was some time in healing, and before it was quite closed he became covered with red shining patches, and had a sore throat. For these symptoms he underwent a further mercurial treatment. For some time he fancied himself well, though occasionally would break out a scaly blotch on various parts of the body. To these he paid little attention. At a later period the palms of the hands, in places, appeared as though they had been blistered, the epidermis was raised, as by a blister, and then peeled off, spreading in circles exactly like fairy rings. Both hands were affected.

He was directed to use the mercurial vapour-bath every other day for half an hour, and to drink some warm decoction of guaiacum. There was no complaint remaining at the end of six weeks, and there has been no relapse. He has remained without any fresh symptom for nearly four years.

Case XLVI.

Superficial primary ulcers in the commencement; as constitutional symptoms: scaly blotches on the skin, superficial inflammation and ulceration of the throat, peeling of the epidermis from the palms of the hands, scaly condition of the nails, loss of the hair, eyebrows, and whiskers; cure by the baths.

A gentleman consulted me for superficial ulceration of the throat, which he considered was venereal, and which doubtless was so, for it was accompanied by other symptoms which could not be mistaken. The membrane of the nostrils was intensely red; there were a few scaly spots on the body; the epidermis peeled off in white, dry patches from the palms of the hands; and the same scurvy condition existed round the roots of the nails. The eyebrows and whiskers fell from the least touch. This patient had taken mercury in

various ways; his disease from time to time abated, but he constantly relapsed, and the symptoms I have detailed had been in existence nine months. The primary disease had consisted of three or four superficial sores, which he had been assured were not venereal.

As this affection was perfectly chronic, and not making any rapid advances, I directed the baths to be used only twice a week, and during their use, a teacupful of warm decoction of guaiacum, night and morning. In six weeks this patient got well, and after many months had not had any fresh symptom.

I have to speak now of one or two cases of a different kind to any previously detailed, namely, the ulcerations which are left after, or succeed to, the healing of primary venereal ulcers, and in which I have seen the "moist mercurial vapour" succeed after the failure of other modes of treatment pursued for long periods without success.

Case XLVII.

Superficial primary sores; secondary disease of the skin under the form of shining, red, copper-coloured patches; subsequently a large induration as hard as cartilage, occupying the site of the original ulcers.

A gentleman contracted some superficial sores upon the penis, which he was assured were not venereal, and would not be followed by constitutional symptoms. They healed, and the patient went abroad. On getting up one morning he perceived his skin covered with red shining patches; being alarmed, he immediately set off for London, where he was told the eruption was venereal, particularly as there accompanied it an ulcer on each tonsil. He was put upon a mercurial course, and the eruption, after a time, got well. About this time an induration made its appearance in the situation of the original ulcers, and kept increasing till it was as large as a small walnut. Notwithstanding the continuance of the mercury by the mouth, the induration remained stationary, and at this period the patient placed himself under my care. There was a large induration, having the appearance and feeling of cartilage, occupying the place of the original sore. It did not seem a general thickening of parts, but like a piece of cartilage in and under the skin. Mercury under two or three forms had failed to remove this.

I placed my patient under the use of the vapour-bath, which was applied three times a week for a month, half an hour each time.

He drank a little warm decoction of guaiacum twice a day, and occasionally took an aperient. A month's treatment was sufficient to remove the induration, and no other symptom of syphilis remained when the employment of the baths was discontinued. There has been no relapse, a very common circumstance with indurations of this character, which I have known frequently return after the discontinuance of mercurial treatment by the mouth.

The indurations which remain after the healing of ulcers of suspicious character, or which come on after they have healed, as they often do, are among the most obstinate symptoms with which surgeons have to contend. In themselves they are a sure indication of constitutional taint, and are either, if left to themselves, followed by secondary diseases of a formidable character, or ulcerating from slight causes of irritation give place to rapidly-spreading and destructive sores; they are exceedingly rebellious, and sometimes remain after the pursuance of various forms of constitutional treatment for long periods. Local treatment by frictions soon renders them painful, and disposes them to open. In these forms of disease the mercurial vapour is very valuable, though it does not act with the rapidity it generally does in affections of the skin, throat, or nose.

Case XLVIII.

Regular primary sore on the frænum, mercurial treatment; copper-coloured scaly eruption on the back, superficial ulceration of the tonsils, ulceration of the mucous membrane of the nose, discharge of pus, blood, and thick crusts, pains in the hip and shin-bones; second mercurial treatment; failure of success; speedy cure by the baths.

A gentleman contracted a sore on the frænum, which healed under a prolonged mercurial course, during which he took a hundred five-grain mercurial pills. He fancied himself well. Three months afterwards, a copper-coloured scaly eruption appeared on the back, the tonsils became enlarged, and their surface was ulcerated; he had a discharge of quantities of hard mucus from the back of the throat, which appeared to come from the nose, and the nostrils, also, gave passage to substances of the same character, mixed with matter and blood. His nights became bad, and he was tormented with severe pains in the hips and legs, which prevented him from sleeping. For these symptoms a second surgeon was consulted, who recommended a blue pill three times a day, and some other medicines. The mouth was kept sore for three months, during

which period the patient took one hundred and forty more pills. Under this treatment the eruption on the back disappeared, but the other symptoms in the nose and throat were worse, and the pains in the hips and legs increased in intensity.

This patient now came to me from a distance, and placed himself under my care. At this period the tonsils were large, and on each side covered with ash-coloured superficial ulcerations; the mucous membrane of the nostrils was intensely red, and covered also with ash-coloured spots. There no doubt existed mischief higher up in the nose, as the voice was thick, and the breathing through the nose obstructed. The patient had now suffered from disease and remedy for seven months. He was pale and emaciated, and much depressed in spirits.

I placed him under the use of the baths, gave him small doses of the extract of opium, and recommended him to drink half a pint of warm decoction of guaiacum, night and morning. The nose and throat were better after the first bath; and at the end of five weeks the baths having been taken every other day, this gentleman had no symptom of disease remaining, had lost his pains, and recovered his strength and spirits.

This case is one of the many that might be recorded as an instance of the failure of mercury, given by the mouth in the ordinary way, to cure venereal diseases. The failure is perhaps not so much in the remedy itself, as in the mode in which it is administered. The quantity given is generally too large, and the patient is not placed in circumstances whilst taking it which are favourable to its action; and a peculiar class of diseases are, by such treatment, created, which are compounded of mercury and syphilis, and which are very difficult to cure. These diseases are generally produced by the indiscriminate use of mercury in the treatment of the primary sore. If mercury be required for the treatment of the primary sore, it must be used according to the plan already laid down. Primary ulcers so treated are never followed by induration; salivation or ulceration of the mouth are never produced; and secondary symptoms would not occur in one case in five hundred.

Case XLIX.

Superficial ulceration of the throat and nose; alteration of the voice; relapses under internal mercurial treatment for four months; speedy cure by the baths.

A gentleman contracted several superficial sores on the penis, which were attended with considerable inflammation. They healed

without induration of the cicatrix, but as the patient had not been seen by me at this period, I do not know what treatment was adopted. About two months after this apparent cure, his throat became dry, particularly the day after any extra indulgence, such as a dinner party. To this succeeded ulceration, several small ash-coloured spots made their appearance on each tonsil; the nose became dry and uncomfortable; he could not breathe through it easily, it appeared obstructed, and the voice was hoarse and unpleasant. The hair came off in small quantities, and the skin was continually disposed to crack and inflame on the seat of the original sores. This patient had taken mercury internally, at intervals, for six months, but, on discontinuing the remedy, his symptoms always returned; and, in addition, the medicine, under any form, after a time, so disordered his stomach that he could not take it long enough to have any real influence over his disease. No other treatment was adopted in this case except the baths: they were used every other day for three weeks; the head was immersed at intervals during the time the patient remained in the bath, a practice which ought always to be followed where the hair comes off, and in diseases of the throat and nose. The gums were elevated, swollen, and red, but nothing more. The cure was complete. In six months there has not been the slightest relapse.

Case L.

Pustular skin disease; induration of the glands in the groin on the left side to a great extent; ulcer and induration on the penis; severe pains in the head and legs; tenderness of the bones of the legs; failure of internal mercurial treatment pursued for four months; cure by the baths and opium.

A gentleman entered my consultation room one morning, looking pale and emaciated, and walking with a stick and a crutch. He gave the following history of his disease. Ten months previously he had contracted a sore, which was situated on the lower part of the glans penis, near the frænum. For the cure of this, the primary, or for the prevention of constitutional or secondary disease, he had taken mercury by the mouth to some extent, and for a long period. Whilst taking this medicine about fifty or sixty small pustules broke out in different parts of the body, chiefly on the arms, legs, and head. His throat about this period became sore, and he had continual discharge from his nose. For these symptoms he was recommended mercury internally in another form. The throat improved, but did not get quite well; some of

the pustules also dried up, and disappeared, but were succeeded by others. The general health, previously good, now began to fail, the appetite went, the patient got thin and suffered from night sweats; he was also tormented during the night with severe pains in the legs and head, those in the ankles and hips at length became so severe that he could not walk without the assistance of a stick and a crutch; and yet, ten months previously, the patient had been in good health, and was only now thirty-two years of age.

On examination, I found a small fissure near the frænum surrounded by considerable induration; the glands in the left groin were enlarged, hard, and tender, the whole mass as large as a turkey's egg. The throat was red, and covered with four or five superficial, ill-conditioned ulcers; the nostrils were in the same state; on both sides there were ulcers; the voice was hoarse, and there was constantly expectorated a quantity of thick, adhesive phlegm. There were from twenty to thirty fresh pustules, of small size, on different parts of the body. The general health was broken up; the appetite was bad; there was no rest; the tongue was foul; the gums spongy; and the breath fetid. This patient was very much emaciated, and the perspirations in the night were most profuse, bed and body linen being completely saturated.

I looked with considerable anxiety on this case; the local symptoms, bad as they were, I did not fear; these were easily and certainly manageable, but the general health of this poor gentleman was so much impaired that I feared for the result. He was doubly poisoned, first by syphilis, and secondly by mercury, very probably acting upon a system peculiarly inimical to the use of it, as the general state of health showed, for I never saw such symptoms produced by syphilis where mercury had not been given for its cure.

I ordered this patient to keep his room, and prescribed for him a strong decoction of sarsaparilla, with beef-tea, and recommended him to take, in addition, seven grains of powdered guaiacum, two of opium, and three of camphor, night and morning. The baths were sent to his lodgings, and he took one on the third day after I first saw him. The bath produced some exhaustion, but he slept well that night without perspiration, and the next day was better. On the third day, again, the bath was repeated with still further improvement; the pustules began to dry up, and the strength was a little improved. Still the appetite continued bad, and the tongue foul; the pains in the limbs still troublesome, though abated. The baths were repeated every third day, and the medicines were con-

tinued. No alteration was made in the treatment; as the patient gained strength the baths were made stronger, and continued for a longer period. This patient remained under my care two months, at the end of which period he left me in tolerable health, which has continued to improve. He has had no relapse.

I do not think it would have been possible to have cured this patient without the moist mercurial vapour. The combination of the vapour bath and the mercurial fume is in such cases invaluable; and wherever the patient is able to support himself on a chair, they may be used with perfect safety, and without risk. The strength and heat of the bath being regulated according to the particular circumstances of the case.

It is in such states that ulcerations, generally fatal under ordinary treatments, occur in the larynx, and low down in the pharynx. I have seen, in the earlier years of my practice, several patients die from these ulcerations, whom I firmly believe would have been saved under the plan I now recommend. Where ulcerations are constitutional, local remedies have little influence over them, except for the moment. Mercury given internally is in such cases almost altogether forbidden by the condition of the general health of the patient. Under the plan I here recommend it may be administered in perfect safety, and is almost the only hope for the patient.

Case LI.

Discharge from the urethra, and excoriations for primary symptoms; subsequently spots on the body; loss of hair and voice; ulceration of the throat and nose; speedy cure by the baths, after a prolonged mercurial treatment with partial success.

A gentleman contracted from the same connexion a discharge from the urethra, and superficial sores upon the penis, which healed in a few weeks with very simple treatment. Sometime afterwards he experienced a dryness and soreness in the throat when he swallowed, and his voice became hoarse; these symptoms increased till at length the voice was almost altogether lost, and he merely spoke in a whisper. He consulted a surgeon, who pronounced the disease in the throat to be syphilitic, and recommended mercury to be taken by the mouth, with the decoction of sarsaparilla. These medicines were continued for some time with partial benefit; but, on their discontinuance, the disease in the throat became worse, whilst the voice had hardly been benefited at all. The patient

now, by the advice of his surgeon, who resided at a distance, placed himself under my care.

At this period the whole of the throat had a deep red appearance, the tonsils were much enlarged and tender externally, and their surface covered with superficial ash-coloured ulcers, one or two of these ulcers on each side being deeper than the rest. The uvula was elongated, thickened, and had a tuberose appearance; on its extremity were situated two or three small ulcers similar to those on the tonsils; there was a difficulty of breathing through the nose, the mucous membrane of which was intensely red, and superficially ulcerated. There were a few small pustules on the body, and one or two on the head; the hair was thinning fast. The general health was good.

This patient took the baths every other day with the head immersed; he was directed to take also some decoction of guaiacum night and morning; the dose in the evening warm on getting into bed; the gums became very tender after the fifth bath, and his condition was much amended by this time; the spots had disappeared from the skin, and the hair no longer came off; the redness was gone from the throat, and the voice was much improved. At the end of three weeks nearly all the symptoms had vanished. The patient still remained a little hoarse, and the uvula had not quite assumed its natural appearance. I heard from this gentleman, a month afterwards, to say he was quite well.

This is another example of that numerous class of constitutional venereal diseases which follow superficial primary sores; the most marked symptoms of which are superficial redness and ulceration of the throat and nose, with spots upon the skin varying in their pathological characters, and loss of hair. These symptoms are so constantly grouped together in such cases that I never see one without looking for the others. I believe where the hair comes off, and the disease of the skin affects its surface only, the mucous membrane of the nose will be found always affected as well as the throat. These symptoms generally yield with extraordinary rapidity to the use of the moist mercurial vapour, whether this be associated with medicines taken internally or not. In some cases the cure has been expedited by the decoction of sarsaparilla and guaiacum, but I never prescribe mercury internally in such cases, if the patient can take the baths.

CASE LII.

Ulceration of the throat; large single pustular blotches on different parts of the body at different times; ulcer of the left nostril.

A respectable female was unfortunately diseased by her husband; I know no more of the primary disease, than that she had a discharge upon her, and some superficial sores which soon healed. Her husband and herself had both afterwards ulceration of the throat which was very rebellious to treatment, but at length healed under a mercurial course. Some months afterwards a large pustule made its appearance on the thigh, and on the arm: these soon dried up, and were covered with large, irregular, black-looking crusts, which, on falling off, left a foul, excavated ulcer beneath. These, after some time healed, leaving a deep red depression in the skin. At a subsequent period the left nostril became dry, and rather painful; and, on examination, there was found an ulcer as large as a shilling, covered with a white, thick slough; the remainder of the membrane of the nostril was of a deep, dark-red colour, which colour pervaded also the other nostril, but the latter was not ulcerated. The ulceration was spreading rapidly, and, the patient believed, had only been in existence about two days. When I first saw this ulcer it only affected the mucous membrane, but its edges were so intensely red, and disease proceeding with so much rapidity, that I apprehended speedy perforation of the cartilage, having more than once seen the soft palate eaten through by an ulcer of this kind in twenty-four hours. I mentioned my fears to my patient, and told her I knew of but one method of speedily, if not immediately, arresting her disease, supposing her case should be as fortunate as some others I had seen submitted to a similar plan of treatment; and this was by means of the moist mercurial vapour, which I advised her instantly to use.

The head was immersed in the bath; and the patient was kept in it for half an hour. The vapour produced, as it sometimes does, a great discharge from the nose. On the next day the redness of the nose was less. The bath was again repeated on this day in the same manner, and for the same time. On the third day the slough had separated; there was very little redness of the nose, and the ulcer looked healthy and disposed to heal. The baths were now continued every other day, and by the time the eighth had been taken the ulcer had healed, and very little complaint remained.

Indeed all that could be said was that the membrane of the nostrils was slightly more red than it ought to be in a perfectly healthy state. This patient did not take any medicine during the time she was using the vapour; the gums became very tender after the fourth bath. She was directed to live on beef-tea, milk, eggs, and cocoa, and her general health, which was before bad, became good; she got fat, and has not relapsed.

Case LIII.

Primary sores cured by an internal mercurial course; afterwards, violent pains in the head, spots on the skin, ulceration of the nose.

A gentleman contracted a sore on the penis, for the cure of which he was directed to take mercury internally; this was done to some extent, and after a time the sore healed, leaving a thickened condition of the prepuce upon which it was situated. Before the termination of the mercurial course he began to suffer from violent pains in the head, which were at times so severe as to induce delirium. The mercury was now given up, the pains became less, but did not leave him, and in addition the hips and legs were affected with similar pains; the nose became dry, and discharged from time to time hard, foul crusts, and there were also a few scaly blotches on different parts of the skin.

The patient now placed himself under my care, and I recommended to him the use of the moist mercurial vapour, and prescribed for him some small doses of opium, and a decoction of the woods to be drank warm in bed night and morning. At this period there was superficial ulceration in each nostril, and the membrane generally was intensely red. The patient was in an agony of distress about his nose, fancying it would fall in, in spite of all my assurances that there was neither disease of the cartilages or bones. His monomania was most distressing; it rendered his life miserable. After a few weeks' treatment the symptoms yielded, the pains were gone, and the ulceration of the nose had healed, though it still remained red, and, occasionally, discharged a lump of hard mucus. This gentleman had no confidence in any treatment except the baths; and, on two occasions fancying himself worse, travelled from the north of Scotland to have them administered under my care. In about three months from the time of my first seeing this patient he was perfectly well, did not present a trace of venereal taint, and his mind had become more tranquil; he had confidence in the permanence of his cure, and felt satisfied that his nose was no longer in danger.

Case LIV.

Chronic disease of the throat, and loss of hair; failure of ordinary treatments; cure by the baths.

A commercial gentleman, aged 34, was sent to me by his surgeon, for my opinion respecting his throat, which had been affected with syphilitic ulceration for several months, and had resisted the ordinary means of cure, or relapsed when medicines were discontinued. This patient had suffered originally from several small superficial sores on the penis. Some time after the healing of which his throat became dry and inflamed, and his hair began to come off. When I first saw this gentleman the throat was intensely red, the tonsils enlarged, and their surface covered with several ash-coloured ulcers; the membrane of the nostrils was also very red, and he could not breathe easily through them; his sense of smell was much impaired, and he had entirely lost his hair, and was obliged to wear a wig. I could not learn the exact mode of treatment that had been employed; but his mouth had been made sore two or three times by mercury.

He was directed to use the baths every other day, and to take very small doses of the bichloride of mercury, not exceeding the twelfth of a grain for a dose, with some decoction of guaiacum, and an opiate at night. The plan was pursued for a month; at the end of this period the throat was well, and he has never again relapsed.

It is a singular fact, and one which I have verified in some hundreds of cases, that the same medicines which have been *unsuccessful*, before the use of the baths, will speedily act beneficially when employed in conjunction with them, though given in very much smaller doses, and the treatment which has been followed by repeated relapses without the baths, becomes permanently efficacious when employed with them.

Case LV.

Superficial primary sores; inflammation and enlargement of the glands in the left groin; mercurial frictions, &c., without success; cure by mercurial frictions and the baths.

A gentleman consulted me respecting some abrasions on the penis, which he had perceived after a suspicious intercourse. They quickly healed; but after a hard day's hunting he perceived a tenderness in the left groin, and the next day walked with difficulty. Being at that time in the north of England he consulted a surgeon

who told him he was suffering from bubo, and a mercurial course was necessary. He took mercury by the mouth, and rubbed in some mercurial ointment into the thighs till the mouth was sore. The glands in the groin continued to enlarge, and it appeared probable they would suppurate. Getting alarmed about his state, he now placed himself under my care.

At this period he could not walk, the mass of inflamed glands was as large as a turkey's egg, red at the summit, exceedingly painful and tender, and from a feeling of fluctuation given to the finger it appeared probable that matter had already formed. I had, however, so repeatedly seen surgeons deceived as to the presence of matter in cases like the present, and protracted diseases produced by incisions, that I abstained from making a puncture in this case, and believe that the lancet in all cases of this description should be used with extreme caution. The patient was much emaciated, and worn out by pain, want of rest, and night perspirations.

I applied a blister over the bubo, gave him an opiate at bedtime, and, after two or three days' rest, recommended that he should commence the use of the baths every other day, and rub in every night half a scruple of mercurial ointment. This patient left me well in five weeks. He had pursued mercurial treatment for three months previously, without the slightest benefit; not the least impression had been made upon his disease. This gentleman has remained perfectly well; it is fifteen months since he was under my care, and he has had no relapse of any kind.

It is remarkable what small quantities of mercury are required internally to combat very formidable diseases, when this remedy is given in conjunction with the baths. Mercurial treatments so conducted are never attended with mischief; and salivation or ulceration of the mouth are never produced, at least with the most ordinary care, whilst the disease as certainly yields.

I will now detail another case where mercury had been taken at intervals for five months for an induration succeeding to the healing of a venereal sore, whilst the patient got well, placed under the same circumstances when he used similar remedies, and took the baths in conjunction with them.

Case LVI.

Superficial primary sores, succeeded by an extensive induration, spots on the skin, node on the arm; relapse, after an apparent cure by internal treatment alone; permanent cure by the baths.

A gentleman contracted three or four superficial sores, which quickly healed, but soon after there appeared on the substance of the prepuce an induration which surrounded the upper portion of the penis. Under the advice of his surgeon he took mercury internally, and also used it by friction; and, under this treatment, continued for three months, the induration disappeared. About a fortnight after the discontinuance of the medicines, the induration began to reappear, and in a few days was larger, and harder than before. The patient now recommenced the use of medicines, but after having taken them nearly four months, the induration still remained the same, and the periosteum of the ulna of the left arm became inflamed, and a few scaly spots made their appearance on different parts of the body.

The patient, at this period, came under my care: the induration, the principal feature of the disease, was like a piece of cartilage under the skin; but the whole of the upper portion of the prepuce was full and red; and the induration was tender to the touch.

I recommended the baths every other day, and advised the medicines to be continued, which consisted in a solution of the bichloride of mercury in the decoction of sarsaparilla. The spots soon disappeared, and were seen no more: the tenderness of the arm next yielded: the induration was longer in giving way: after the third bath, however, it was manifestly softer and less tender, but had not entirely disappeared for ten weeks, the treatment having been from time to time interrupted by the business avocations of the patient.

I do not believe it would have been possible to have cured this patient by internal medicines alone. He had continued them for three months in the first instance before the induration yielded; and it was clear that the constitutional taint still remained, by the return of disease the moment the remedies were suspended, with the addition of fresh symptoms.

In the second instance the internal remedies were of no avail, although continued for nearly four months. Yet the disease yielded in ten weeks when the baths were used, and the same medicines were taken with them. There has been no relapse after the second treatment, and the cure has been perfect.

Case LVII.

Constitutional syphilis of two years' duration: enlargement of the left testis; nocturnal pains; night perspirations; emaciation; thickening of the bones of the nose on the left side; ulcer of the septum of the nose, and obstruction of the naso-lachrymal canal; failure of the ordinary treatments pursued for two years; cured by the vapour in four months, with the exception of one symptom.

A delicate-looking young man came to request my opinion respecting the symptoms under which he laboured, which had harassed him, with little variation, for the last two years. Latterly he had become worse, and the complaint in his nose rendered him very anxious, more especially as his surgeon had given him a very unfavourable opinion with regard to its termination.

About two years and a half ago he had contracted superficial sores upon the penis, which had healed under ordinary treatment, and for which he had taken mercury by the mouth, though I could not learn to what extent. About two years ago he observed a continual discharge from his nose, and this was sometimes mixed with matter, and occasionally with blood: at intervals of two or three days or a week, there came from his nose hard crusts of dry mucus, bearing the shape of the spongy bones of the nose, and having on the surface which had been adherent, spots of pus, as though they had been thrown off from an ulcerated surface. These symptoms were chiefly confined to the left nostril, and the bones of the nose on this side were considerably larger than those on the right, and tender to the touch. After these symptoms had continued for some months the eye on the same side began to water, and the tears from time to time flowed over the cheek. On pressing the lachrymal sac, the tears, with occasionally a few drops of pus, could be pressed out through the puncta. About this period the bones of the legs became very painful, particularly at night when in bed; and the left testicle began to enlarge without pain; night perspirations set in, the appetite was lost, and the general health became altogether impaired and bad.

At this time the patient came under my care. He was then pale and emaciated: on examination of the nose I discovered a dirty-looking superficial ulcer of the septum, and of the inferior turbinated bone on the left side: the membrane of the nostrils on both sides was intensely red; the patient spoke thick, and was at times hoarse, doubtless resulting from the condition of the nose. The bones of the nose and cheek, on the left side, were enlarged, tender to the touch, and the skin was slightly red over these parts. The

throat was dry and uncomfortable occasionally, though neither inflamed nor ulcerated.

I directed this patient to use the vapour, with the head immersed, to continue it for half an hour, using three drachms of the binoxide of mercury for each bath, which was taken two days together and then omitted for one.

At the same time I recommended ten grains of the compound powder of ipecacuanha, with as much guaiacum, to be taken night and morning, and twice in the day a glass of warm decoction of sarsaparilla, with five grains of the hydriodate of potass, and twenty minims of the wine of colchicum.

At the end of a fortnight the improvement was very marked; the pains were gone, the perspiration had ceased; the patient could eat, and the swelling of the testicle was nearly reduced. The tenderness had disappeared from the bones of the nose, and the fulness was much less. There remained, however, still some discharge from the nose, and the tears still ran over the cheek.

The treatment was continued at intervals for three months; and, at the end of this time, the patient appeared in very good health; he had not a symptom of constitutional taint, unless the partial obstruction of the nasal duct, still remaining, was to be considered as such; and this canal was evidently assuming, though slowly, its natural condition.

I have already stated that an inflamed and ulcerated condition of the mucous membrane of the passages of the nose is a very common symptom of constitutional syphilitic taint; and I have seen a number of cases where it has continued for a very long period of time without extending further than the mucous membrane lining the nose, though in other instances its advances are more rapid, and its consequences more serious. In some instances syphilitic affections of the nose are limited to a mere chronic inflammation of the membrane lining the meati, and are accompanied by discharges of thickened, dry, mucous crusts, having the shape and appearance of the bones themselves; and this I have known continue for many years without getting much worse. On examining the nostrils of such patients they are found to be intensely red, covered with mucous crusts, and the membrane in places slightly ulcerated. The previous history of the patient, the co-existence of some other symptom of venereal taint, and the effects of appropriate treatment leave no doubt as to the nature of such diseases. In other instances more serious forms of ulceration are present, and these ulcers as-

sume either a chronic or an acute character. I have seen two instances, in one of which there had been a constitutional taint for six years, and, in the other, for nine; and the nostrils affected the whole period, where an acute ulcer has perforated the septum in a few days.

In some rarer cases the chronic inflammation of the nose is not limited to the meati, but extends from the inferior one up the nasal duct, and partially or completely obliterates it. I have seen three cases of this kind, one which had existed several years; and the discharge of tears over the cheek coincided with that of the peculiar syphilitic crust from the nose on the side on which the obliteration of the duct existed. This is a probable, and, I believe, a common cause of that disease, known as "stillicidium lachrymarum."

Case LVIII.

Superficial primary sore, followed by bubo; ordinary treatment; constitutional taint five months afterwards in the shape of copper-coloured blotches on the face, head, and back, with loss of hair, and superficial disease of the throat; the disease stationary under ordinary treatment for six months; cure by the vapour in nine weeks.

A gentleman contracted, in February, 1847, a superficial sore, which was succeeded by a bubo which did not suppurate: the patient was treated in the ordinary manner, and he fancied for three or four months that he was quite well. In June of the same year he had superficial ulceration of the throat, and about the same time he perceived a large copper-coloured, or dark-brown spot on the forehead, just above the root of the nose; another soon appeared on the side of the nose, one on the right cheek, and several of smaller character on different parts of the face, neck, head, and back. The hair at this time came off in large quantities, when brushed or combed, and soon became very thin. These spots were neither preceded, accompanied, or followed by inflammation, ulceration, or desquamation of the skin, and they are to be distinguished from that kind of discoloration of a venereal character, which is seated in the cicatrix of a constitutional ulcer of the skin, after it has healed, which cicatrix is always depressed in the substance of the skin itself and of which I have already related some examples.

From June to September this patient underwent various kinds of treatment for the spots, which continued stationary, or rather increased during this period; and early in October he placed himself under my care. At this time the spots were dark brown dis-

colorations, nearly circular, unaccompanied by pain, uneasiness, or inflammation of any kind, and did not disappear under pressure. He had evidently been submitted to a mercurial course, as there were two or three ulcers in the mouth; the gums were spongy, and bled from the slightest friction, and there was strong mercurial fetor of the breath.

I directed this gentleman to use the vapour twice a week, with half an ounce of the bisulphuret for each fumigation. He also took a tumbler of the compound decoction of guaiacum twice a-day, with two drops of the liquor potassæ arsenitis. The treatment was not varied: at the end of nine weeks the spots could not be perceived, and the general health had much improved.

This is a very rare form of constitutional venereal taint, and is to be distinguished from all other varieties of syphilitic disease by the skin. Cazenave[1] corroborates from his experience the rarity of its occurrence, and mentions cases in which it has been confounded with other cutaneous affections. These copper discolorations, however, of venereal origin, due to an altered condition of the pigment of the skin, almost invariably coexist with other symptoms, whose nature is more unequivocal. In the case just detailed, the previous history, the condition of the throat, and the loss of hair leave no doubt as to the true nature of the disease. Syphilitic alterations in the colour of the skin (maculæ syphiliticæ) are rarely, if ever, ushered in, or accompanied, by that febrile action which is common at the commencement of the ordinary venereal eruptions; they are not accompanied by any other alteration of the skin beyond change of colour; there is neither inflammation, ulceration, nor desquamation.

These rare forms of disease are slow in their progress, and rebellious to all ordinary treatments; indeed it is rare to find them cured at all under such circumstances. Cazenave quotes a case of this nature from Biett's practice, in which the patient's health was entirely destroyed by the means adopted to remove them, which, even in the hands of men of such ample experience, was unsuccessful. The case I have just detailed, of even aggravated form, for the spots on the face and back were as distinct and deep as though they had been painted on the skin, and completely banished the patient from society, was cured by the vapour in nine weeks, after five months' treatment by the ordinary remedies, during which

[1] Maladies Vénériennes de la Peau, p. 575, et seq.

time the spots rather increased than diminished, and the health was beginning to fail under the remedies employed.

Other forms of "maculæ," or discolorations, are less vivid, and do not even always attract the patient's attention, though they render some others very uneasy. It is common, during treatment for other venereal symptoms, to find, on undressing the patient, the surface of the abdomen, chest, or thighs covered with light, copper-coloured blotches, which are precisely of the same nature as those which I have just described. If the treatment by the vapour is being followed, they commonly, if not always, yield to it, though sometimes very slowly; but ordinary treatments, though pursued for months, appear to have little or no influence over them.

Case LIX.

Constitutional syphilis of ten years' duration: periodical attacks of disease in the throat; affections of the nose and testis; at the end of nine years an acute attack of disease in the throat, with speedy perforation of the soft palate; failure of mercurial and iodine treatments conducted in the ordinary manner; speedy and remarkable improvement of all the symptoms, and disappearance of many of them under the treatment by the vapour.

Mr. C—, aged 23, consulted me, when passing through Birmingham in 1840, for a slight eruption and sore throat which were both of syphilitic origin: he had had primary sores some months previously, for which he had taken mercury to salivation. I neither saw nor heard from this patient for nine years; but, early in 1849, he again came to me. He stated that he had never been well since he first saw me; that from time to time he had had attacks of inflammation, and ulceration of the throat, which had yielded to medicine, (the hydriodate of potass,) but had always recurred after the medicine had been discontinued for a little time. He had suffered also from discharges of hard, thick crusts from the nose; the nasal duct had been obstructed, and the operation for its restoration had been attempted and failed, and the patient suffered, consequently, from lachrymal fistula. He had enlargement and induration of the left testis (syphilitic sarcocele,) he was pale, emaciated, and weak, and suffered from profuse night sweats.

Such had been the condition of the patient during the nine years which had elapsed between his first and second visits to me. The immediate cause of the second consultation was the state of the throat. Four days only previous to this visit he began to suffer from pain in the roof of the mouth, which was much inflamed;

and, on the second morning after these symptoms had first been observed, he discovered a large hole in the roof of the mouth. The whole of the roof of the mouth and soft palate were at this period intensely and lividly red; and at the junction of the soft with the hard palate there existed an ulcer of the size of a sixpence, which had perforated the velum, and through which the nasal mucus flowed, as it was close under the posterior nares: the ulcer was rapidly spreading, and threatened destruction to the whole of the contiguous parts. The throat and fauces presented no trace of inflammation.

Encouraged by the success which had attended the use of the fumigation in two other cases, I immediately proposed it to my patient, who was immersed in a powerful bath for half an hour, for which was used two drachms of the binoxide, and two drachms of the bisulphuret of mercury. On the next day the pain was gone, the ulcer had not extended, and the inflammation was certainly less. On the second and third days the baths were repeated in the same manner, and of the same strength. The mouth had now become so sore that they could not be continued, although neither salivation nor ulceration was produced, merely an even redness and swelling of the gums.

The patient was directed to take twenty drops of Battley's solution of opium three times a day, with plenty of sarsaparilla broth.[1]

At the end of a fortnight the testis had recovered its natural state; the inflammation in the mouth had entirely disappeared, and the ulcer was granulating and contracting fast; the mouth still continued sore.

At the end of two months, this patient did not present any symptom of constitutional taint; the perforation in the palate remained, though it had much contracted, and did not occasion much inconvenience. There has been no fresh symptom for ten months.

This case is remarkable, and instructive in many points, and forcibly illustrates certain laws in the history of secondary syphilis. It shows, in the first place, that acute and mutilating diseases not unfrequently occur in constitutions broken down by long-continued venereal taint. It shows again that the condition of the nose, and the nature of the discharges from it, are very frequently the chief symptoms that mark a latent venereal taint: this is a point which

[1] Decoct. Sarsæ co., ℔ss;
Carnis bovis, ℔ss.
Coque simul super lent igne ad dimidium.
Dose. Ad libitum.

I have before had occasion to allude to; and it is one of very considerable importance. The treatment of this case illustrates the power of the moist mercurial fume in arresting formidable diseases of this nature, and arresting them so quickly, so certainly, and so safely. I do believe that no other plan of treatment could have been framed which would have saved the whole of the roof of the mouth from horrible mutilation.

This ulcer was evidently of nasal origin, and the velum had been perforated from behind: it had not been preceded by any ulceration in the throat, or on the forepart of the velum: and the first knowledge the patient had of the existence of the ulcer, was the sight of the perforation in the palate. I repeat, that in all cases of secondary syphilis the passages of the nose should be carefully examined, as they furnish some of the best tests we can have of the existence of a latent constitutional taint.

Case LX.

Constitutional syphilis of three years' duration: discharge of crusts from the nose, with ulceration; great wasting of the body, with hoarseness, difficulty of swallowing, and pain in the larynx; local employment of the vapour of the binoxide of mercury; cure.

E. F—, aged 36, was admitted into the Queen's Hospital, under my care, early in 1849. She had been the subject of secondary and constitutional syphilis for about three years, during which time she had undergone a great variety of treatment. She was, at the period of her admission, much emaciated, had night perspirations, and could only speak in a whisper. She had superficial ulceration of the septum of the nose, the whole lining membrane of which was vividly red, with daily discharges of the characteristic crusts. Her chief complaint, however, was of pain deeply seated in the throat and neck; and the larynx was very tender when handled or pressed.

I suspected that she had syphilitic ulceration of the windpipe.

By means of an apparatus, easily contrived, a stream of the vapour, made with half a drachm of the binoxide of mercury for each fume, was directed into the fauces and up the nostrils every morning. After four or five inhalations, the mouth became sore, and the remedy was used less frequently.

The symptoms entirely disappeared under this treatment; and, three months afterwards, when the patient called on me, she had recovered her health and strength, and appeared perfectly well.

I have, in many instances, employed the vapour of the binoxide, the iodide, and the gray oxide of mercury locally, in many anomalous symptoms, which were consequent upon protracted and constitutional syphilis, and which did not appear to require the general application of such remedies. These diseases have been fissures and cracks in the tongue, pains in the throat, fauces, and larynx, which had previously been the seat of ulceration, fissures of the anus, cracks about the lips, &c. One of these cases I have just detailed, and I could bring forward a very considerable number, in almost all of which one remedy or the other has been perfectly successful. In cases where it is wished to employ the vapour of mercury locally to affections of the tongue, throat or nose, it is better to use the binoxide, or the gray oxide, as the iodide, or the vapour of the bisulphuret, produces so much sneezing and coughing, that some persons are unable to bear the application long enough to be useful.

Case LXI.

Constitutional syphilis of four years' duration: treatment by the vapour; uneasiness and pain in the throat still recurring at times; local application of the vapour of the binoxide of mercury; disappearance of the symptoms; no relapse.

A commercial traveller placed himself under my care to be treated for secondary and constitutional syphilis, from which he had suffered for nearly four years.

The symptoms consisted in superficial ulceration of the throat, pains in the bones of the nose, with superficial ulceration of its mucous membrane, and discharge of pus, blood, and mucous crusts, with some suspicious spots on the skin, and a general cachectic condition, the result probably of large quantities of mercury which he had taken for the cure of the primary disease.

He was treated by the moist vapour of the bisulphuret, and binoxide of mercury. In about ten weeks he had perfectly recovered; and at the end of three months had become very florid, and got very fat. There remained, however, some uneasiness in the throat, and from time to time a blush of redness spread over the pharynx and fauces, accompanied by dryness, and slight pain when he swallowed. These symptoms rendered him uneasy, but as they did not appear to me sufficiently important to condemn him a second time to a full course of treatment, I directed half a drachm of the vapour of the binoxide of mercury to be directed into the throat three times a week. Each application gave him great relief: at the end

of three weeks the throat no longer troubled him, and for twelve months there has been no return of disease in any form.

It not unfrequently happens that a single symptom continues to annoy patients, when they do not present any appearance of general constitutional taint, and where the treatment previously adopted has been sufficient to render the mind pretty easy on such a point. These symptoms generally consist in periodical attacks of redness, and dryness in the throat, in soreness, and occasional discharge from the nose, in fissures, and superficial ulceration of the tongue, and the anterior of the mouth; in scaly, dry blotches on the palms of the hands and soles of the feet; and in pains deeply seated in the neck and throat. In all such cases, and I could bring forward instances of every form I have mentioned, a local treatment by the vapour almost invariably succeeds in removing the symptoms, which, I believe, in such cases, to be most commonly local, and where a general treatment is much more likely to do harm than good. I bring forward one or two cases in illustration.

Case LXII.

Constitutional syphilis of fifteen months' duration: removal of the symptoms under treatment by the vapour of the bisulphuret of mercury; subsequently fissure, and red elevations upon the tongue; treatment locally by the vapour of the iodide; permanent and perfect cure.

A young gentleman who had been suffering from secondary and constitutional syphilis for about fifteen months, came under my care in the early part of 1848. He was treated methodically by the fumigations, and took in addition some decoction of guaiacum, with the syrup of iodide of iron, as he was of a weak and delicate constitution. About two months after the disappearance of any venereal taint, a long fissure or crack came in the tongue, and four or five large, red, hard, elevations appeared, having the appearance of small strawberries; the tongue was red and painful. These symptoms appeared to me of venereal origin, although his health appeared good, and he presented no other appearance of taint.

I suggested to him the use of a local fumigation of the vapour of five grains of the iodide of mercury every other day. No other remedy was used, and in three weeks the fissure had closed, and the tongue presented its natural appearance.

I have seen several instances in which fissures, superficial ulcerations, or indurations, thickening, and unevenness of some parts of

the tongue, have remained for years after the patient had been cured of all other symptoms of syphilitic taint; and, I believe, although these are occasionally dependent upon a general affection, they are, nevertheless, in many instances, local diseases only. They are almost always rendered worse by mercury given by the mouth, and probably are merely forms of chronic stomatitis, produced originally by the internal administration of this drug. It will easily be discovered whether they are symptoms of general infection, by the co-existence of some of the other symptoms, of which I have so frequently spoken. If the health be good, and such symptoms are absent, they are local diseases. They yield in a rapid manner to treatments by vapour, and the cures are permanent.

Case LXIII.

Excavated ulcers of the throat; treatment internally by a full course of mercury; recurrence of the disease; a second course of mercury; a third attack of ulceration; complete and permanent cure by the vapour of the iodide of mercury.

S. P—— was treated by a full course of mercury internally for two deep ulcers of the throat, one situated on each tonsil, under which the ulcers healed. A short time afterwards the throat again ulcerated, and the patient was a second time submitted to a mercurial course, pushed to salivation: the ulcers again healed, but, in a short time, again broke out. The patient was, at this period, placed under my care. The health was a good deal broken by the two courses of mercury previously employed, the patient was thin and weak, and the appetite bad. I directed the patient to take the compound infusion of gentian, with dilute nitric acid, and some of the compound extract of sarsaparilla, with two grains of the extract of opium every night. The vapour of three grains of the iodide of mercury was also directed into the throat every other day. In eighteen days the ulcers had healed, and the patient has not again relapsed.

This is not a solitary case: I have seen a great number, exactly similar, where ulcers which had healed under mercury, internally administered, have frequently again broken out, and have at length rapidly and permanently closed under treatment by the vapour: of all local treatments to venereal ulcers of the throat, none are equal to the moist mercurial fume. Whether there be mere redness, the excavated ulcer, creeping or superficial ulcers, this is the local remedy "*par excellence.*"

Clara C——, a patient in the Queen's Hospital, had superficial

ulceration, with much redness of the throat, and shining copper-coloured blotches on the head and other parts: she had been treated by a long course of the bichloride of mercury, which had cured the skin disease; but the ulceration of the throat, although at times disappearing, kept constantly recurring: she had also two small ulcers of the tongue. Both the ulcers of the throat and tongue healed rapidly under the use of the vapour of the iodide, and the cure was permanent.

Case LXIV.

Constitutional syphilis of seven years' duration; nocturnal pains, with enlargement and tenderness of the bones of the nose, and of the bones of the left arm; sarcocele of the left testis; failure of the ordinary treatments; complete cure by the author's method in four months without relapse.

A dramatic artist of celebrity, who had been married for some years, and who had not had any primary venereal disease, in any shape or form, since his marriage, consulted me in the earlier part of 1849. He came to me as a forlorn hope, despairing of relief, as he had constantly relapsed after discontinuing the best-framed ordinary treatments, conducted by eminent surgeons, amongst whom may be mentioned the late Mr. Aston Key. When I first saw this gentleman his chief complaint was of the left fore-arm, the bones of which were much enlarged, very painful and tender to the touch; but his sufferings were much increased during the night, when the pains were at times so excruciating as to deprive him more or less completely of rest; he had not slept one night, without pain, for seven years. The radius and ulna near the wrist were much enlarged, and were nodulated and uneven. The bones of the nose were a good deal thickened, and he had shooting pains in them. The left testis was five times the size of the right, heavy and lobulated, but neither painful nor tender.

I consider this case as one of a decided venereal character; although mercury, pushed to salivation, and iodine had previously failed in affording more than a mere transient and temporary relief. Knowing the benefit which I had derived in many former cases, from the use of the baths, I held out to my patient a hope that they might be serviceable to him also.

I directed him to use half an ounce of the bisulphuret of mercury and half a drachm of the iodide of mercury for each of the first three baths, which were to be taken every third day, and to take internally some small doses of the hydriodate of potass with colchicum.

After the third bath, which had slightly affected the mouth, the nocturnal pains had disappeared, and the tenderness was gone from the arm; he could bear the bones pressed and handled, although previously they had been exquisitely tender. The treatment was conducted at intervals for three months; sometimes the baths were taken once a week, at other times not so frequently; the medicines also were continued. The pains never returned, and, at the end of the period I mention, the nose and testis had been long perfectly well.

This was a well-marked case of chronic syphilitic periostitis; the treatment of which, by my method, was rapid, safe, and successful. Perhaps no forms of constitutional syphilis are more formidable than those which are seated in the periosteum and bones; and such affections are very frequently due to exposure, neglect, or want of care during a mercurial course which has been prescribed for the cure of some form of secondary disease, but which not only frequently fails in curing it, but disposes the system to the production of new symptoms of a still more formidable character than those for which the remedies were originally prescribed. It has been said that the iodide of potassium is all but a specific for periosteal inflammation, more particularly that of syphilitic origin: it is certainly, in many cases, an excellent and efficient remedy; but there are many cases also in which it totally and completely fails; not so with the plan of treatment I am advocating: it is all but certain in its influence over such diseases, and the rapidity with which it cures is very remarkable.

The patient, whose case I have just detailed, was so convinced of the superiority of this method, that I could with difficulty prevent him sending the details of his case, and its treatment, to a Metropolitan daily paper. He had been under the best ordinary treatment for nearly seven years, with little or no benefit; and he was completely and permanently cured in three months by my method. In such cases I believe, after several experiments made on the subject, that the best remedies to employ are combinations of the bisulphuret and the iodide of mercury in the proportions, or nearly so, which I have mentioned in the details of the case.

The next case is equally remarkable in the effects of the remedies employed, although the duration of the disease was not by any means so long as the preceding; but still, in many respects, the symptoms were of an equally formidable character.

Case LXV.

Secondary and constitutional disease of six months' duration, consisting in copper-coloured scaly blotches on the neck, pustules and tubercles on the face, thickening, with tenderness of the bones of the right leg, and disease of the testis; failure of ordinary treatments; rapid and permanent cure by the vapour of the iodide and bisulphuret of mercury.

A young gentleman, aged 20, contracted gonorrhœa, and a primary sore, late in the autumn of 1848, for which he was treated by a surgeon in the North of England, where he resided. The primary diseases were apparently cured, but soon after the disappearance of the discharge from the urethra, a rash made its appearance all over the body (roseola syphilitica?) which soon died nearly, but not completely, away. Some time afterwards, blotches of a more decided character appeared on the neck, and on the face, and he began to suffer from pains in the right leg, which were at times sufficiently severe to occasion lameness. About this time the patient became languid, and was troubled occasionally with profuse night perspirations. For these symptoms he took various medicines under the direction of experienced surgeons; and, about six months after the first appearance of the skin disease he placed himself under my care.

When I first examined this gentleman he presented a most formidable array of constitutional symptoms. On the face were forty or fifty pustules, with hard, nodular bases; and, in the substance of the left cheek, two tubercles, each as large as a horse bean, and one on the back of the neck, still larger, the surfaces of which were beginning to inflame. On the forepart of the neck were a number of copper-coloured scaly blotches of the size of a shilling and the body generally was covered with a faint copper-coloured mottling, into which the first rash had subsided. The right testis was three times the size of the left, and the tibia of the right leg much enlarged, very painful at night, and tender to the touch; the patient had evidently taken mercury, for his gums were spongy, and the breath had a strong fetor; yet his disease had gradually progressed, and new symptoms were from time to time added to the old.

Formidable as the details of this case must appear, I felt certain of a speedy and permanent cure under the use of the moist vapour of the iodide of mercury in a short time. I directed a bath, with three drachms of the bisulphuret of mercury, and one of the iodide

to be administered every other day, with the head immersed, and to be continued for half an hour: the patient was ordered also to take freely of the compound decoction of guaiacum, with small doses of the iodide of potassium, and three grains of the acetic extract of colchicum, and one of the extract of opium every night.

The first bath relieved the pains in the leg, and other parts: and, after the second, the tibia might be pressed without flinching; and the pains, except at such a time, were altogether gone; the hard bases of the tubercles, even at this early period, were less, and the tubercles softer. Very little medicine was taken in this case. The patient drank a cup of guaiacum tea two or three times a day, in which were dissolved three grains of the iodide of potassium, and he took also a dose of opium at bed-time. Such remedies alone, and in such doses, would have exerted but little influence over so formidable a disease, and many of the symptoms could not have been expected to yield at all to such medicines. The cure was complete in five weeks, and it has been real and permanent; no relapse nor return of complaint in any form. The general health has been also, as it commonly is, much improved by the treatment.

In cases of complicated constitutional syphilis, such as the one just detailed, we cannot estimate too highly the plan of treatment by the moist mercurial fume. In such and similar cases the symptoms are so numerous and varied, that, in the ordinary way, we are almost at a loss to know what kind of internal treatment to recommend. No plan is laid down by authors of the greatest experience for cases like the present. In speaking of complicated syphilis, Ricord says, "We must treat the epiphenomenon of the disease, let it be whatever it may, and the worst treatment is that which is exclusively directed towards the removal of one symptom, when ten others require modification."

When the disease has been still further complicated by the internal administration of mercury, and we find fetor of the breath, with a spongy condition of the gums, and a certain amount of debility, and *malaise*, with night perspirations, which commonly set in at these periods, the difficulties of treatment are much increased. In such states, a further internal treatment by mercury is inadmissible, and might even prove fatal, and iodine offers but little better prospect of success.

At these periods, and in such cases, the moist mercurial fume,

employed in the manner and with the modifications I have already detailed, is all but certain in its effects. The patient soon begins to amend, the evils caused by the internal administration of mercury soon pass off; the appetite, strength, and general health rapidly improve, whilst the symptoms of constitutional taint are quickly and permanently eradicated.

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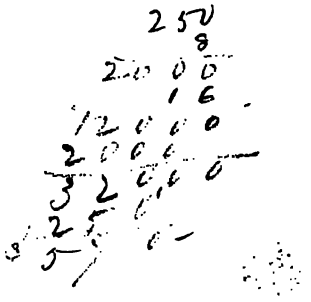

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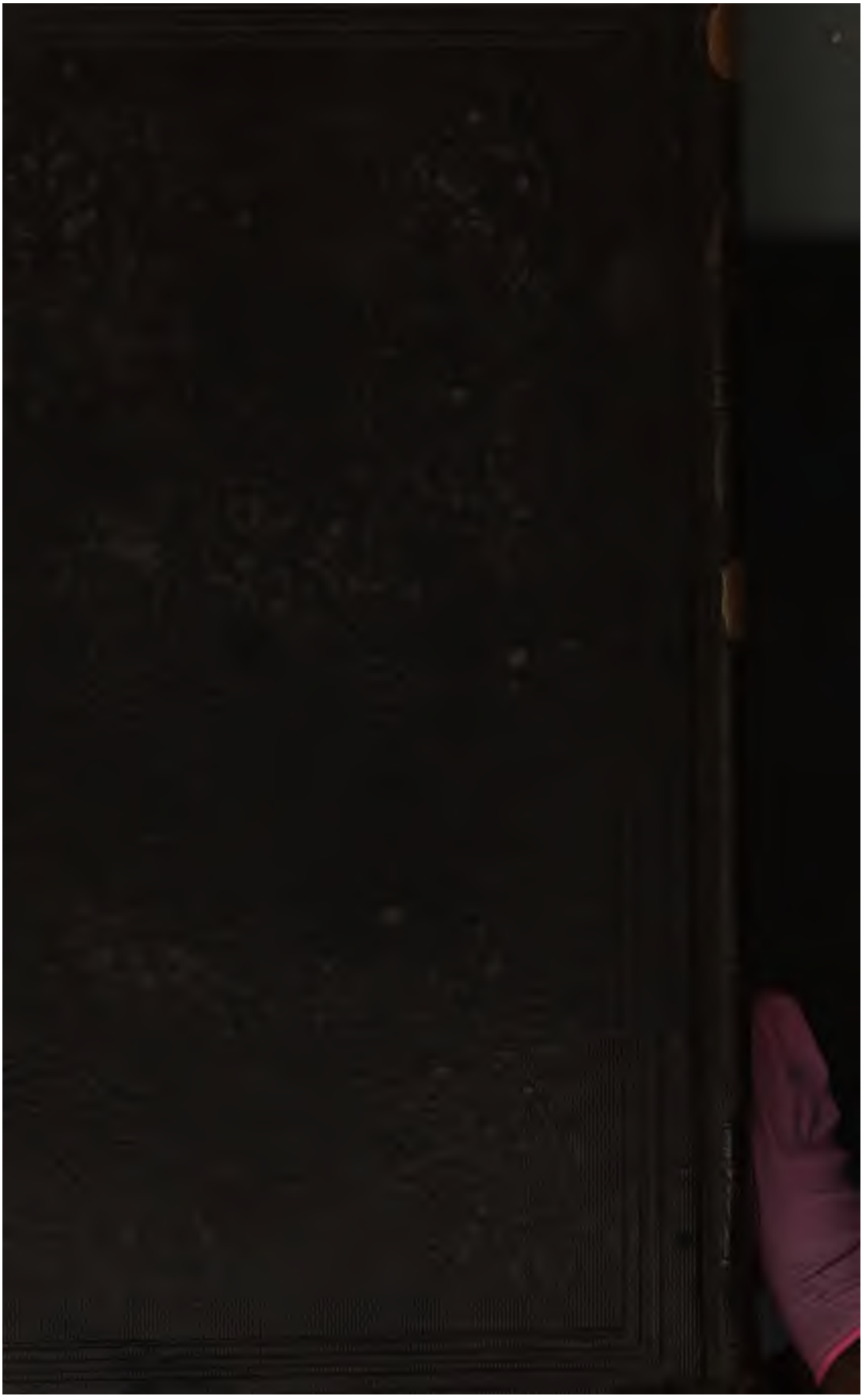
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